Are You Looking For Automotive Qualified LDO, Ripple Blockers or LDO Controller?

- Non-Automotive
- Automotive
- Ripple Blockers (High PSRR)

LDO Controller

Choose the type of LDO
LDO Selector (# of Output)

How Many Outputs? (Channels or Vout Pins)

Single (1)  Dual (2)  Multiple (3-4)

Single = 1 output, Dual = 2 outputs, Multiple = 3 or 4 outputs
What is the MAX input voltage range?

- Up to 5.5Vin
- 6Vin to 16Vin
- 18Vin to 36Vin
- 38Vin to 120Vin
- Negative LDO

This is not the range of input voltages, only the Max VIN!
What is the MAX input voltage range?

- Up to 6Vin
- 10Vin to 26Vin

This is not the range of input voltages, only the Max VIN!
LDO Selector (Max Vin-3-4)

What is the MAX input voltage range?

6.0Vin

This is not the range of input voltages, only the Max VIN!
What is the MAX current output range?

- 100mA to 150mA
- 200mA to 300mA
- 400mA to 500mA
- 600mA to 5.0A
What is the MAX current output range?

- ≤50mA
- 100mA to 150mA
- 200mA to 300mA
- 400mA to 500mA
- 600mA to 1A
- 1.2A to 7.5A
What is the MAX current output range?

- 100mA to 150mA
- 200mA to 300mA
- 400mA to 500mA
- 600mA to 3A
- 3.5A to 7.5A
What is the MAX current output range?

Up to 150mA
What is the current output combination?

- 150mA/150mA
- 150mA/300mA (*)
- 300mA/300mA (*)
- 200mA/200mA (Not Available)
- 300mA/500mA (*)
- 500mA/500mA
- 2A/2A

* Different Iout combinations

LDO Selector (Iout-2 6V)
What is the current output combination?

- 150mA/150mA
- 150mA/300mA (*)
- 200mA/200mA
- 300mA/300mA
- 300mA/500mA (*)
- 500mA/500mA
- 2A/2A

* Different Iout combinations
LDO Selector (Iout-3-4)

What is the current output combination?

- 150/150/150mA Triple
- 200/200/200mA Triple
- 250/250/250mA Triple
- 200/200/200/1mA Quad
LDO Selector (Feature 150)

Choose your feature

- High PSRR
- Ultra Low Dropout
- Small Size
- Low Power (Low Iq)
- Low Vin
- General Purpose
LDO Selector (Feature 300)

Choose your feature

- High PSRR
- Ultra Low Dropout
- Small Size
- Low Power (Low Iq)
- Low Vin
- General Purpose
LDO Selector (Feature 500)

Choose your feature

- High PSRR
- Ultra Low Dropout
- Small Size
- Low Power (Low Iq)
- Low Vin
- General Purpose
LDO Selector (Feature 5)

Choose your feature

- High PSRR
- Ultra Low Dropout
- Low Vin
LDO Selector (High PSRR)

Choices Made
• Single Output
• 5.5Vin Max
• 100-150mA Output
• High PSRR

MIC5308
90dB @ 1kHz
Bias Rail, 1.6x1.6DFN

MIC5305
85dB @ 1kHz
20uVrms Noise, 2x2 DFN

MIC5365/6
80dB @ 1kHz
1x1 DFN
# LDO Selector (UL Dropout)

## Choices Made
- Single Output
- 5.5Vin Max
- 100-150mA Output
- Ultra Low Dropout

### MIC5301
- 40mV Dropout
- SOT23-5, DFN6

### MIC5306
- 45mV Dropout
- 16uA Iq, SOT23-5

### MIC5308
- 45mV Dropout
- 90dB PSRR, DFN6

### MIC5305
- 60mV Dropout
- 85dB PSRR, DFN6

### MIC5302
- 50mV Dropout
- 1.2x1.6 DFN4

### MIC5304
- 85mV Dropout
- 0.5% Acc. DFN6
LDO Selector (Small Size)

Choices Made
- Single Output
- 5.5Vin Max
- 100-150mA Output
- Small Size

**MIC5365/6**
1x1mm DFN, TSOT, SC70
80 dB PSRR

**MIC5375/6**
1x1mm DFN, SC70
Low Drop (120mV)
# LDO Selector (Low Iq)

<table>
<thead>
<tr>
<th>Choices Made</th>
<th>MIC5306</th>
<th>MIC5308</th>
<th>MIC5304</th>
<th>MIC5326</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Output</td>
<td>16uA Iq, 45mV Vdo, SOT23-5</td>
<td>23uA Iq, 90 dB PSRR, 1.6x1.6mm DFN</td>
<td>24uA Iq, Selectable Vout, 1.6x1.6mm DFN</td>
<td>24uA Iq, 85mV Vdo, 1.2x1.6mm DFN</td>
</tr>
<tr>
<td>5.5Vin Max</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100-150mA Output</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Iq</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LDO Selector (Low Vin)

Choices Made

- Single Output
- 5.5Vin Max
- 100-150mA Output
- Low Vin

MIC5308
1.6Vin Min, 90dB
1.6x1.6mm DFN
LDO Selector (Cost)

Choices Made
- Single Output
- 5.5Vin Max
- 100-150mA Output
- General Purpose

**MIC5365/6**
- 150mA, 80dB PSRR, 29µA Iq, 1x1 DFN

**MIC5317**
- 150mA, 70 dB PSRR 1x1 DFN
LDO Selector (High PSRR 2)

Choices Made
- Single Output
- 5.5Vin Max
- 200-300mA Output
- High PSRR

**MIC5309**
90dB @ 1kHz

**MIC94310**
85dB, RippleBlocker

**MIC5363/4**
80dB @ 1kHz
LDO Selector (UL Dropout 2)

Choices Made
- Single Output
- 5.5Vin Max
- 200-300mA Output
- Ultra Low Dropout

MIC5309
100mV Dropout

MIC5307
120mV Dropout

MIC94310
40mV Dropout, RippleBlocker

MIC5303
100mV Dropout

MIC5309
100mV Dropout
LDO Selector (Small Size 2)

Choices Made
- Single Output
- 5.5Vin Max
- 200-300mA Output
- Small Size

MIC5501/2/3/4
1x1mm DFN, SOT23

MIC5337
1.2x1.6mm DFN
Low Dropout

MIC5303
1.2x1.6mm DFN
Low Dropout
Choices Made

• Single Output
• 5.5Vin Max
• 200-300mA Output
• Low Iq

**MIC5307**
20uA Iq

**MIC5309**
23uA Iq

**MIC5337**
24uA Iq

**MIC5327**
24uA Iq
LDO Selector (Low Vin 2)

Choices Made
- Single Output
- 5.5Vin Max
- 200-300mA Output
- Low Vin

MIC5309
1.7Vin Min

MIC94310
1.8Vin Min
RippleBlocker
Choices Made
• Single Output
• 5.5Vin Max
• 200-300mA Output
• General Purpose

MIC5501/2/3/4
300mA 1x1 DFN

MIC5317
150mA 1x1 DFN
LDO Selector (High PSRR 3)

Choices Made
- Single Output
- 5.5Vin Max
- 400-500mA Output
- High PSRR

**MIC5528**
70dB @ 1kHz

**MIC94305/25/45**
85dB, RippleBlocker
LDO Selector (UL Dropout 3)

**Choices Made**
- Single Output
- 5.5Vin Max
- 400-500mA Output
- Ultra Low Dropout

- **MIC47050**
  - 44mV Dropout
  - 3.6V Max Input

- **MIC47053**
  - 44mV Dropout
  - 3.6V Max Input

- **MIC94305/25/45/55**
  - 100mV Dropout
  - RippleBlockers

- **MIC5325**
  - 110mV Dropout
LDO Selector (Small Size 3)

Choices Made
• Single Output
• 5.5Vin Max
• 400-500mA Output
• Small Size

MIC5524
1x1mm DFN
Smallest 0.5A LDO
LDO Selector (Low Iq 3)

Choices Made
- Single Output
- 5.5Vin Max
- 400-500mA Output
- Low Iq

MIC47050
6uA Iq

MIC47053
6uA Iq
Choices Made
• Single Output
• 5.5Vin Max
• 400-500mA Output
• Low Vin

**MIC47050**
1.0Vin Min
6uA Iq

**MIC94305/25/45/55**
1.8Vin Min
RippleBlocker

**MIC5325**
1.7Vin Min
Low Dropout
LDO Selector (Cost 3)

Choices Made
- Single Output
- 5.5Vin Max
- 400-500mA Output
- General Purpose

MIC5524
1x1mm DFN
Smallest 0.5A LDO

MIC5528
High PSRR
DFN6
LDO Selector (High PSRR 4)

Choices Made
- Single Output
- 5.5Vin Max
- 600-5 A Output
- High PSRR

**MIC47100**
- 80dB @ 1kHz
- 1A Output

**MIC59300**
- 65dB @ 1kHz
- 3A Output

**MIC59150**
- 60dB @ 1kHz
- 1.5A Output, Low DO
LDO Selector (UL Dropout 4)

Choices Made
- Single Output
- 5.5Vin Max
- 600-5 A Output
- Ultra Low Dropout

MIC47100
80mV Dropout
1.0A Output

MIC59150
100mV Dropout
Low Input Voltage
LDO Selector (Low Vin 4)

Choices Made
• Single Output
• 5.5Vin Max
• 60-5 A Output
• Low Vin

- **MIC47100**
  - 1.0Vin Min
  - 1.0A, High PSRR

- **MIC59300**
  - 1.0Vin Min
  - 3.0A Output

- **MIC59150**
  - 1.0Vin Min
  - 1.5A Output
LDO Selector (16Vin Max 50)

Choices Made
• Single Output
• 6.0 - 16Vin Max
• $\leq 50$mA Output

- **MIC5231**
  12Vin Max, 0.65uA $I_q$
  10mA Output, SOT-23

- **MIC5232**
  7Vin Max, 1.8uA $I_q$
  10mA Output, TSOT

- **TC1014**
  6Vin Max, 85mV DO, $50$mA Output, SOT-23
LDO Selector (16Vin Max 300)

Choices Made
• Single Output
• 6.0 - 16Vin Max
• 200-300mA Output

- **MCP1755**
  16Vin Max, 80 dB PSRR
  300mA Output, DFN8

- **MIC5207**
  16Vin Max, 75 dB PSRR
  180mA Output, SOT23

- **MCP1703A**
  16Vin Max, 2uA Iq
  250mA Output, SOT23

- **MIC5353**
  6Vin Max, Cost
  300mA Output, DFN6

- **MCP1824/S**
  6Vin Max, 0.4% Acc
  300mA Output, SOT23

- **MIC5259**
  6Vin Max, Cost
  300mA Output, VDFN6

- **MIC5318**
  6Vin Max, 110mV DO
  300mA Output, DFN6
LDO Selector (16Vin Max 500)

Choices Made
• Single Output
• 6.0 - 16Vin Max
• 400-500mA Output

- **MCP1725**
  - 6Vin Max, 0.5% Acc
  - 500mA Output, DFN8

- **MIC5209**
  - 16Vin Max, 75 dB PSRR
  - 500mA Output, DFN8

- **MIC5237**
  - 16Vin Max, Rev. Batt Prot
  - 500mA Output, TO-220

- **TC1262**
  - 6Vin Max, 80uA Iq
  - 500mA Output, SOT-223
LDO Selector (16Vin Max 1)

Choices Made
- Single Output
- 6.0 - 16Vin Max
- 600mA – 1A Output

MIC3775
6Vin Max, Rev Current Prot, 750mA, MSOP8

MIC37100
6Vin Max, Rev Batt and Current Prot, 1A, SOT223

MIC3975
16Vin Max, Rev Current Prot, 750mA, MSOP8

MIC39100
16Vin Max, Rev Batt and Current Prot, 1A, SOIC8

TC2117
6Vin Max, 0.5% Acc 800mA Output, SOT223

MCP1826/S
6Vin Max, 225mV DO 1A Output, SOT223
LDO Selector (16Vin Max 7.5)

Choices Made
• Single Output
• 6.0 - 16Vin Max
• 1.2A – 7.5A Output

**MIC297xx**
7.5A, 16/26Vin Max, TO-220, TO-247

**MCP1727**
1.5A, 6Vin Max, Very Accurate, SOIC8, DFN8

**MIC37xxx**
1.5/3/5A, 6Vin, RevCurrent Prot, 3/5-pin SPAK, SOIC8

**MIC39xxx**
1.5/3/5A, 16Vin, RevCurrent Prot, 3/5-pin TO-220, DDPAK

**MIC47xxx**
1.5/3A, 1.4 – 6.5Vin, Rev Prot, 3/5-pin TO-252
LDO Selector (36Vin Max 150)

Choices Made
- Single Output
- 18 - 36Vin Max
- 150mA Output

MIC5236
30Vin Max, Load Dump, Rev Current Prot, 150mA

LP2951
30Vin Max, 100 uA Iq
100mA Output, SOIC8

MCP1790/1
30Vin Max, Load Dump
70mA, SOT223

MIC5200
26Vin Max, 70dB PSRR
100mA, SOIC8

MIC5233
36Vin Max, Low Iq, Rev Batt and Current
LDO Selector (36Vin Max 300)

Choices Made
- Single Output
- 18 - 36Vin Max
- 300mA Output

 MIC2954
30Vin Max, Load Dump
250mA Output, SOIC8

 MIC5201
30Vin Max, 75dB PSRR
200mA, SOT223
LDO Selector (36Vin Max 500)

Choices Made
• Single Output
• 18 - 36Vin Max
• 500mA Output

**MIC29201**
26Vin Max, 70dB PSRR
400mA Output, SOIC8

**MIC5239**
30Vin Max, 23uA Iq
500mA, SOT223
Choices Made
• Single Output
• 18 - 36Vin Max
• 600mA – 3A Output

MIC29150/1/2
26Vin Max, Load Dump, 1.5A Output, TO-220

MIC29300/1/2/3
26Vin Max, Load Dump, 3A, TO-220

MIC29371
26Vin Max, 160uA Iq, 750mA, SOIC8
LDO Selector (36Vin Max 7.5)

Choices Made
• Single Output
• 18 - 36Vin Max
• 3.5A – 7.5A Output

MIC29500/1/2/3
26Vin Max, Load Dump, 5A Output, TO-220

MIC29751/2
26Vin Max, Load Dump 7.5A, TO-247
LDO Selector (120Vin Max150)

Choices Made
- Single Output
- 38-120Vin Max
- 150mA Output

**MIC5280**
120Vin Max, Load Dump
25mA Output, SOIC8

**MIC5281**
120Vin Max, 90 dB, Load Dump, 25mA, MSOP8

**MIC5282**
120Vin Max, 90dB Load Dump, 50mA, MSOP8

**MIC5283**
120Vin Max, 8uA Iq, Load Dump, 150 mA, DFN8
LDO Selector (-Vin)

Choices Made
• Single Output
• Negative LDO
• All 100 mA output

MIC5270/1
-16Vin Max, 35/25uA Iq, 50dB, SOT23-5

TC59
-10Vin Max, 3 uA Iq, 50dB, SOT23-3
LDO Selector (Dual 150/150)

Choose your feature

- High PSRR
- Ultra Low Dropout
- Small Size
- Low Power (Low Iq)
- General Purpose
Dual LDOs
\[ I_{\text{OUT1}} = I_{\text{OUT2}} \]

**5.5V**
- 2A
  - MIC68220
- 500mA
  - MIC5355
  - MIC5356
  - MIC5357
- 150mA
  - MIC5310
  - MIC5320
  - MIC5321
  - MIC5322
  - MIC5370/1
  - MIC5380/1
  - MIC5264
  - MIC5392/3
- 300mA
  - MIC5311
  - MIC5312
  - MIC5313
  - MIC5314
  - MIC5315
  - MIC5316
  - MIC5330
  - MIC5331
  - MIC5332
  - MIC5333
  - MIC5335
  - MIC5338/9
  - MIC5396/7/8/9

**6V**
- 150mA
  - MIC5254
- 100mA
  - MIC5202

**26V**
- 16V
  - 500mA
    - MIC5212
  - 150mA
    - MIC5210
  - 80mA
    - MIC5211
  - 50mA
    - MIC5208
Dual LDOs

\[ I_{\text{OUT1}} \neq I_{\text{OUT2}} \]

5.5V

150mA / 300mA
- MIC2210
- MIC2211
- MIC2212
- MIC2213
- MIC2214
- MIC2219

300mA / 500mA
- MIC5350
Multi-Output LDOs

- **MIC5374**
  - 200mA / 200mA / 200mA / 1mA

- **MIC5384**
  - 250mA / 250mA / 250mA

- **MIC2215**
  - 200mA / 200mA / 200mA / 1mA

- **TC1307**
  - 4 Ch. Select Mode
  - 150mA / 150mA / 150mA / 150mA

- **MIC5373/83**
  - 200mA / 200mA / 200mA

- **MIC5385**
  - 150mA / 150mA / 150mA

- **MIC5387**
  - 150mA / 150mA / 150mA
LDO Controllers

5.5V
- MIC5159
- MIC5190
- MIC5191

36V
- MIC5156/57/58
Low-Dropout Regulators

High Voltage
- MCP1702 13.2V Low Iq, 250 mA
- MCP1703 16V Low Iq, 250 mA
- MCP1703A 16V Low Iq, 250 mA
- MCP1754/S 16V PSRR, 150 mA
- MCP1755/S 16V PSRR, 300 mA
- MCP1804 28V 150 mA
- MCP1790/1 30V Auto, 70 mA

50mA
- TC1014/54
- TC1070/2
- TC2014/54
- TC1223

100mA
- MCP1700
- MCP1701A
- TC1016 (80mA)
- TC1015/55
- TC2015/55
- TC1071/3
- TC1224
- TC1188/9 120mA

150mA
- MCP1711 Capless
- TC1185/6/7

250mA
- MCP1725
- TC1262/3/8
- MCP1825/S
- MCP1700
- TC1015/55
- TC2015/55
- TC1071/3
- TC1224
- TC1188/9 120mA

300mA
- TC1107/8
- TC1173/4
- TC1269
- MCP1824/S

500mA
- TC1264/5
- TC2117

800mA
- TC1264/5
- TC2117

1A
- TC1264/5
- TC2117

1.5A
- TC1264/5
- TC2117

LDO Combo ICs
- TC1016 (80mA)
- TC1071/3
- TC1224
- TC1188/9 120mA

Application Specific LDOs
- TC1017
- TC1217

Negative LDO
- TC59

LDO + Switcher
- TC1300/7
- TC1303/4

Dual LDOs
- TC1301/2

LDO Demo & Eval Boards

C = Ceramic Capacitor Stable
LDO Selector
( High PSRR 150/150)

Choices Made
• Dual Output
• 6Vin Max
• 150mA/150mA
• High PSRR

MIC5310
>70dB PSRR
35mV dropout

MIC5321
>75dB PSRR
35mV dropout

MIC5322
>75dB PSRR
35mV dropout
Choices Made
- Dual Output
- 6Vin Max
- 150mA/150mA
- Ultra Low Dropout

LDO Selector
(ULDO 150/150)

- MIC5310
  35mV dropout
  >70dB PSRR

- MIC5320
  35mV dropout
  1.6x1.6mm MLF

- MIC5321
  35mV dropout
  >75dB PSRR

- MIC5322
  35mV dropout
  >75dB PSRR
LDO Selector (Low Iq 150/150)

Choices Made
- Dual Output
- 6Vin Max
- 150mA/150mA
- Low Power (Low Iq)

MIC5370/1
32µA Iq, ±2% accuracy
1.6x1.6mm MLF

MIC5380/1
32µA Iq, ±1% accuracy
1x1mm MLF

MIC5392/3
32µA Iq, ±1% accuracy
1.2x1.2mm MLF
LDO Selector
(Small Size 150/150)

Choices Made
• Dual Output
• 6Vin Max
• 150mA/150mA
• Small Size

MIC5370/1
1.6x1.6mm MLF
32µA Iq, ±2% accuracy

MIC5380/1
1x1mm MLF
32µA Iq, ±1% accuracy

MIC5392/3
1.2x1.2mm MLF
32µA Iq, ±1% accuracy

MIC5320
1.6x1.6mm MLF
35mV dropout

MIC5321
1.6x1.6mm MLF
35mV dropout

MIC5322
1.6x1.6mm MLF
35mV dropout
Choices Made
• Dual Output
• 6Vin Max
• 150mA/150mA
• General Purpose

MIC5210
>70dB PSRR
35mV dropout
LDO Selector (150/300)

Choices Made
- Dual Output
- 6Vin Max
- 150mA/300mA

MIC2210
3x3mm MLF®

MIC2211
3x3mm MLF®

MIC2212
3x3mm MLF®
POR Function

MIC2213
3x3mm MLF®
1 Open-draın driver

MIC2214
3x3mm MLF®

MIC2219
3x3mm MLF®
Externally Accessible Feedback Pins

MIC2211
3x3mm MLF®
POR Function
Choices Made
• Dual Output
• 6Vin Max
• 200mA/200mA

MIC5388/9
1.5X1.0mm WLCSP
±2% Accuracy
LDO Selector (Dual 300/300)

Choose your dimensions (mm)

- 1.2 x 1.6
- 1.6 x 1.6
- 2.0 x 2.0
- 2.5 x 2.5
- 3.0 x 3.0
LDO Selector
(1.2x1.6mm 300/300)

Choices Made
• Dual Output
• 6Vin Max
• 300mA/300mA
• 1.2mm x 1.6mm

MIC5396/7/8/9
1.2x1.6mm DFN
Choices Made
• Dual Output
• 6Vin Max
• 300mA/300mA
• 1.6mm x 1.6mm

MIC5335
1.6x1.6mm MLF
High PSRR >65dB

MIC5338/9
1.6x1.6mm MLF
± Output Accuracy
LDO Selector
(2.0x2.0mm 300/300)

Choices Made
• Dual Output
• 6Vin Max
• 300mA/300mA
• 2.0mm x 2.0mm

MIC5313
2.0x2.0mm MLF®
>65dB PSRR

MIC5315
2.0x2.0mm MLF®
Voltage Select Function

MIC5330
2.0x2.0mm MLF®
>70dB PSRR

MIC5331
2.0x2.0mm MLF®
>65dB PSRR

MIC5332
2.0x2.0mm MLF®
>65dB PSRR
LDO Selector
(2.5x2.5mm 300/300)

Choices Made
• Dual Output
• 6Vin Max
• 300mA/300mA
• 2.5mm x 2.5mm

MIC5314
2.5x2.5mm MLF
85mV dropout

MIC5316
2.5x2.5mm MLF
85mV dropout

MIC5333
2.5x2.5mm MLF
High PSRR >65dB
LDO Selector
(3.0x3.0mm 300/300)

Choices Made
• Dual Output
• 6Vin Max
• 300mA/300mA
• 3.0mm x 3.0mm

MIC5311
3.0x3.0mm MLF
LowQ® Mode

MIC5312
3.0x3.0mm MLF
LowQ® Mode with
Integrated POR
LDO Selector (300/500)

Choices Made
• Dual Output
• 6Vin Max
• 300mA/500mA

MIC5350
2.0x2.0mm MLF
±2% Accuracy,
Fast Startup
LDO Selector
(500/500)

Choices Made
• Dual Output
• 6Vin Max
• 500mA/500mA

MIC5212
±1% Initial Accuracy
Low Dropout and Low Iq

MIC5355/6
8pin ePad MSOP
±2% initial Accuracy

MIC5357
8pin ePad MSOP
38µs start up time
LDO Selector
(2A/2A)

Choices Made
• Dual Output
• 6Vin Max
• 2A/2A

MIC68220
Programmable Ramp Control™,
3.0x3.0mm MLF
LDO Selector
(Dual 10-26Vin Max)

Choices Made
- Dual Output
- 10-26Vin Max

MIC5208
16Vin Max, 50mA/50mA
Micrel Mini 8® MSOP

MIC5210
16Vin Max, 150mA/150mA
SOT-23 Package

MIC5211
16Vin Max, 80mA/80mA
SOT-23 Package

MIC5212
16Vin Max, 500mA/500mA
SOIC-8 Package

MIC5202
26Vin Max, 100mA/100mA
8pin SOIC Package
LDO Selector
(3-4 Output 150/150/150)

Choices Made
• 3-4 Output
• 6Vin Max
• 150/150/150mA

MIC5385
150/150/150mA
2.0x2.0mm MLF®
70dB PSRR

MIC5387
150/150/150mA
1.6x1.6mm MLF®
70dB PSRR
LDO Selector
(3-4 Output 200/200/200)

Choices Made
• 3-4 Output
• 6Vin Max
• 200/200/200mA

MIC5373/83
200/200/200mA
2.5x2.5mm MLF®
55dB PSRR
LDO Selector
(3-4 Output 250/250/250)

Choices Made
• 3-4 Output
• 6Vin Max
• 250/250/250mA

MIC2215
250/250/250mA
4.0x4.0mm MLF®
70dB PSRR
LDO Selector
(3-4 Output 200/200/200/1)

Choices Made
• 3-4 Output
• 6Vin Max
• 200/200/200/1mA

MIC5374/84
200/200/200/1mA
2.5x2.5mm QFN®
55dB PSRR
What is the current output?

- 200mA Output Current
- 500mA Output Current
Ripple Blocker™ (200mA)

Choices Made
- Ripple Blocker™
- 200mA Output Current

MIC94300
Input Follower
1.2mm x 1.6m MLF®

MIC94310
Fixed Output
1.2mmx1.6mm DFN
Ripple Blocker™ (500mA)

Choices Made
• Ripple Blocker™
• 500mA Output Current

MIC94305
Input Follower
1.6mmx1.6mm DFN

MIC94325/45/55
Fixed Output
1.6mmx1.6mm DFN
LDO Controller

What is the MAX input voltage range?

5.5V

36.0V

This is not the range of input voltages, only the Max VIN!
LDO Controller (5.5V Max Vin)

Choices Made
- LDO Controller
- 5.5 Max Vin

MIC5159
IttyBitty® SOT-23-6 Package

MIC5190
3x3mm MLF® and MSOP-10

MIC5191
10-lead MLF® and MSOP-10
LDO Controller (36V Max Vin)

Choices Made
- LDO Controller
- 36V Max Vin

MIC5156/57/58
Available in DIP and SOIC
Optional Current Limit
(35mV)
Features:

- AEC-Q100 qualified
- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 8µA
- 150mA guaranteed output current
- Adjustable output from 1.23V to 5.5V
- Stable with ceramic capacitors
- Ultra-high PSRR (75dB at 10kHz)
- Ultra-high line rejection (load dump)
- High output accuracy: ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient, 8-pin ePad SOIC package
Features:

- AEC-Q100 qualified
- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 6µA
- 50mA guaranteed output current
- Adjustable output from 1.27V to 5.5V
- Withstands up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra-high PSRR (80dB at 10kHz)
- Ultra-high line rejection (load dump)
- High output accuracy: ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin ePad MSOP package
Features:

- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 6µA
- 25mA guaranteed output current
- Adjustable output from 1.27V to 5.5V
- Withstands up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra-high PSRR <90dB
- Ultra-high line rejection (load dump)
- High output accuracy:
  - ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin ePad MSOP package
Features:

- Wide input voltage range: 4.5V to 120V DC
- Very low quiescent current: 31µA typical
- 25mA guaranteed output current
- Adjustable output from 1.215V to 5V
- DC voltage protection down to -24V
- Ability to withstand up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra high PSRR >80dB for RF applications
- High output accuracy
  - ±2% initial accuracy
  - ±3% over temperature (-40°C to +125°C)
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin ePad SOIC package
- AEC-Q100 qualified
Features:

- Small 2mm × 2mm DFN package
- Low dropout voltage: 100mV at 300mA
- Output noise 120µV_{RMS}
- Input voltage range: 2.3V to 5.5V
- 300mA guaranteed output current
- Stable with ceramic output capacitors
- Low quiescent current: 85µA total
- 30µs turn-on time
- High output accuracy
  - ±2% initial accuracy
  - ±3% over temperature
- Thermal shutdown and current-limit protection
Features:

- 6V to 45V input supply range
- Capable of driving up to 70W
- Ultra-low EMI via dithering (MIC3231)
- Programmable LED drive current
- Feedback voltage = 250mV ±3%
- Programmable switching frequency (MIC3230/1) or 400kHz fixed frequency operation (MIC3232)
- PWM dimming and separate enable shutdown
- Frequency synchronization with other MIC3230s
- Protection features:
  - Over voltage protection (OVP)
  - Over-temperature protection
  - Under voltage lockout (UVLO)
- -40°C to +125°C junction temperature range
Features:

- 6.0V to 20V input voltage range
- High efficiency (>90%)
- ±5% LED current accuracy
- High-side current sense
- Dedicated dimming control input
- Hysteretic control (no compensation!)
- 1A internal power switch
- Up to 1MHz switching frequency
- Adjustable constant LED current
- 5V on board regulator
- Over-temperature protection
- -40°C to +125°C Junction temperature range
- Available in an 8-Pin ePad SOIC package
Features:

- 6V to 37V input voltage range
- High efficiency (>90%)
- ±5% LED current accuracy
- MIC3202: Dither enabled for low EMI
- MIC3202-1: Dither disabled
- High-side current sense (up to 1A)
- Dedicated dimming control input
- Hysteretic control (no compensation required)
- Up to 1MHz switching frequency
- Adjustable constant LED current
- Over-temperature protection
- -40ºC to +125ºC junction temperature range
Features:

- 4-pin 1.2mm x 1.2mm Thin QFN Package
- +2.7V to +9V supply voltage range
- 16V gate drive at VDD = 9V
- 8V gate drive at VDD = 2.7V
- Operates in low and high side configurations
- 150μA (typical) supply current at VDD = 5V
- <1μA shutdown supply current
- -40°C to +125°C Junction Temperature Range
Features:

- 3A peak output current
- 2.2A continuous operating current
- Input voltage range: 3.0V to 5.5V
- Adjustable output voltage down to 1.0V
- Output noise less than 5mV
- Ultra fast transient performance
- Unique switcher plus LDO architecture
- Fully integrated MOSFET switches
- Micro-power shutdown
- Easy upgrade from LDO as power dissipation becomes an issue
- Thermal shutdown and current limit protection
- 4mm x 6mm x 0.9mm MLF® package
Features:

- Output current up to 1.5A
- Input voltage range: 3.0V to 5.5V
- Adjustable output voltage down to 1.0V
- Output noise less than 5mV
- Ultra fast transient performance
- Unique switcher plus LDO architecture
- Fully integrated MOSFET switches
- Micro-power shutdown
- Easy upgrade from LDO as power dissipation becomes an issue
- Thermal shutdown and current limit protection
- 4mm x 6mm x 0.9mm MLF® package
MIC5283
120V 150mA Ultra-Low IQ High-PSRR Linear Regulator

Features:

- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 8µA
- 150mA guaranteed output current
- Adjustable output from 1.22V to 5.5V
- Stable with ceramic output capacitors
- Ultra-high PSRR (75dB at 10kHz)
- Ultra-high line rejection (load dump)
- High output accuracy:
  - ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin ePad SOIC packages
- Very low profile 3mm x 3mm MLF® package
Features:

- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 6µA
- 50mA guaranteed output current
- Adjustable output from 1.27V to 5.5V
- Withstands up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra-high PSRR (80dB at 10kHz)
- Ultra-high line rejection (load dump)
- High output accuracy:
  - ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient, 8-pin MSOP and 8-pin ePad MSOP packages
Features:

- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 6µA
- 25mA guaranteed output current
- Adjustable output from 1.27V to 5.5V
- Withstands up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra-high PSRR <90dB
- Ultra-high line rejection (load dump)
- High output accuracy:
  - ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin MSOP and 8-pin ePad MSOP packages
Features:

- Wide input voltage range: 4.5V to 120V DC
- Very low quiescent current: 31µA typical
- 25mA guaranteed output current
- Adjustable output from 1.215V to 5V
- DC voltage protection down to -24V
- Ability to withstand up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra-high PSRR >80dB for RF applications
- High output accuracy
  - ±2% initial accuracy
  - ±3% over temperature (-40°C to +125°C)
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin ePad SOIC package
Features:

- Ultra-low quiescent current ($I_Q = 23\mu A @ I_O = 100\mu A$)
- Continuous 500mA output current
- Wide input range: 2.3V to 30V
- Low dropout voltage: 350mV at 500mA
- ±1.0% initial output accuracy
- Stable with ceramic or tantalum output capacitor
- Logic-compatible enable input
- Low output voltage error flag indicator
- Overcurrent protection
- Thermal shutdown
- Reverse leakage protection
- Reverse battery protection
- High power SOIC-8, MSOP-8 and SOT-223 packages

MIC5239
Low Quiescent Current 500mA µCap LDO
Features:

- High-accuracy: 5V, guaranteed 250mA output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- Input can withstand -20V reverse battery and +60V positive transients
- Error flag warns of low output voltage
- Logic-controlled electronic shutdown
- Output programmable from 1.24V to 29V (MIC2954-07/08)
- Available in TO-220, TO-92, and surface-mount SOT-223 and SOP-8 packages
**Features:**

- Ultra-low quiescent current \( (I_Q \text{ equals } 20\mu A \text{ at } I_O \text{ equals } 100\mu A) \)
- Wide input voltage range: 2.3V to 30V
- Low dropout:
  - 230mV at 50mA
  - 320mV at 150mA
- Adjustable output voltage
- Typical ±1.0% initial output accuracy
- Logic-compatible enable input
- Overcurrent protection
- Thermal shutdown protection
- Reverse leakage and reverse battery protection
- Thermally enhanced 8-pin ePad SOIC package
Features:

- Ultra-low quiescent current ($I_Q$ equals 20µA at $I_O$ equals 100µA)
- Wide input range: 2.3V to 30V
- Low dropout:
  - 230mV at 50mA;
  - 300mV at 150mA
- Fixed 2.5V, 3.0V, 3.3V, 5.0V and adjustable outputs
- ±1.0% initial output accuracy
- Stable with ceramic or tantalum output capacitor
- Load dump protection: -20V to +60V input transient survivability
- Logic-compatible enable input
- Low output flag indicator
- Reverse leakage protection
- Reverse battery protection
- High power SOP-8 and MSOP-8
Features:

- High accuracy: 3.3V, 4.85V, or 5V with guaranteed 150mA output
- Extremely low quiescent current
- Low-dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Use as regulator or reference
- Needs only 1.5µF for stability
- Current and thermal limiting
- Unregulated DC input can withstand –20V reverse battery and +60V positive transients
- Error flag warns of output dropout
- Logic-controlled electronic shutdown
- Output programmable from 1.24V to 29V
Features:
- Wide input voltage range: 2.3V to 36V
- Ultra-low ground current: 18µA
- Low dropout voltage of 270mV at 100mA
- High output accuracy of ±2.0% over temperature
- µCap: stable with ceramic or tantalum capacitors
- Excellent line and load regulation specifications
- Zero off-mode current
- Reverse battery protection
- Reverse leakage protection
- Thermal shutdown and current limit protection
- IttyBitty® SOT-23-5 package
Features:

- Wide input voltage range: 2.3V to 36V
- Ultra-low ground current: 18µA
- Low dropout voltage of 270mV at 100mA
- High output accuracy of ±2.0% over temperature
- µCap: stable with ceramic or tantalum capacitors
- Excellent line and load regulation specifications
- Zero off-mode current
- Reverse battery protection
- Reverse leakage protection
- Thermal shutdown and current limit protection
- IttyBitty® SOT-23-5 package
Features:

- High accuracy 5V, guaranteed 100 mA output
- Extremely low quiescent current
- Low-dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Use as regulator or reference
- Needs only 1µF for stability
- Current and thermal limiting
- LP2951 Versions Only
  - Error flag warns of output dropout
  - Logic-controlled electronic shutdown
  - Output programmable from 1.24V to 29V
Features:

- High current capability
  - MIC29150/29151/29152/29153: 1.5A
  - MIC29300/29301/29302/29303: 3A
  - MIC29500/29501/29502/29503: 5A
  - MIC29750/29751/29752: 7.5A
- Low dropout voltage
- Low ground current
- Accurate 1% guaranteed tolerance
- Reverse-battery and load dump protection
- Zero-current shutdown mode (5-pin versions)
- Error flag signals output out-of-regulation (5-pin versions)
- Also characterized for smaller loads with industry-leading performance specifications
- Fixed voltage and adjustable versions
Features:

- High current capability
  - MIC29150/29151/29152/29153: 1.5A
  - MIC29300/29301/29302/29303: 3A
  - MIC29500/29501/29502/29503: 5A
  - MIC29750/29751/29752: 7.5A
- Low dropout voltage
- Low ground current
- Accurate 1% guaranteed tolerance
- Extremely fast transient response
- Reverse-battery and load dump protection
- Zero-current shutdown mode (5-pin versions)
- Error flag signals output out-of-regulation (5-pin versions)
- Also characterized for smaller loads with industry-leading performance specifications
- Fixed voltage and adjustable versions
Features:

- 3A current capability
- Low dropout voltage
- Low ground current
- Accurate 1% guaranteed tolerance
- Extremely fast transient response
- Reverse-battery and “Load Dump” protection
- Zero-current shutdown mode
- Error flag signals output out-of-regulation
- Also characterized for smaller loads with industry-leading performance specifications
MIC29150/1/2/3
High-Current LDOs

Features:

- High current capability
  - MIC29150/29151/29152/29153: 1.5A
  - MIC29300/29301/29302/29303: 3A
  - MIC29500/29501/29502/29503: 5A
  - MIC29750/29751/29752: 7.5A
- Low dropout voltage
- Low ground current
- Accurate 1% guaranteed tolerance
- Extremely fast transient response
- Reverse-battery and load dump protection
- Zero-current shutdown mode (5-pin versions)
- Error flag signals output out-of-regulation (5-pin versions)
- Also characterized for smaller loads with industry-leading performance specifications
- Fixed voltage and adjustable versions
Features:

- High output voltage accuracy
- Guaranteed 1.25A output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- High output voltage accuracy
- Guaranteed 1.25A output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
Features:

- High output voltage accuracy
- Guaranteed 750mA output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- Input can withstand -20V reverse battery and +60V positive transients
- Error flag warns of output dropout
- Logic-controlled electronic shutdown
- Output programmable from 1.24V to 26V (MIC29372)
- Available in TO-220, TO-263, TO-220-5, and TO-263-5 packages
Features:

- High output voltage accuracy
- Guaranteed 400mA output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- Input withstands -20V reverse battery and +60V positive transients
- Error flag warns of output dropout
- Logic-controlled electronic shutdown
- Output programmable from 1.24V to 26V (MIC29202/MIC29204)
- Available in TO-220, TO-220-5, and surface-mount TO-263-5, SOT-223, and SO-8 packages.
Features:

- High output voltage accuracy
- Variety of output voltages
- Guaranteed 200mA output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- Reversed battery protection
- Load-dump protection (fixed voltage versions)
- Zero off-mode current state
- Logic-controlled electronic enable
- Available in SO-8 and SOT-223 packages
Features:

- Wide input voltage range: 2.3V to 24V
- Ultra-low ground current: 18µA
- Low dropout voltage: 310mV at 150mA
- High output accuracy: ±2.0% over temperature
- µCap: stable with ceramic or tantalum capacitors
- Excellent line and load regulation specifications
- Zero off-mode current
- Reverse battery protection
- Reverse leakage protection
- Thermal shutdown and current limit protection
- IttyBitty® SOT-23-5 package
Features:

- Wide input voltage range: 2.3V to 24V
- Ultra-low ground current: 18μA
- Low dropout voltage: 300mV at 150mA
- High initial output accuracy: ±1.0%
- Stable with ceramic or tantalum capacitors
- Excellent line and load regulation specifications
- Reverse battery protection
- Reverse leakage protection
- Thermal shutdown and current limit protection
- Power TO-252-5 (D-Pak) package
- Adjustable output from 1.24V to 20V
Features:

- High output voltage accuracy
- Variety of output voltages
- Guaranteed 100mA output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- Zero off-mode current
- Logic-controlled electronic shutdown
- Available in 8-pin SOIC, MM8® 8-pin MSOP and SOT-223 packages
Features:

- Fast transient response
- 7.5A current capability
- 700mV dropout voltage at full load
- Low ground current
- Accurate 2% guaranteed tolerance
- Zero-current shutdown mode (MIC29712)
- No minimum load current
- Fixed voltage and adjustable versions
Features:

- Fast transient response
- 5A current capability
- 700mV dropout voltage at full load
- Low ground current
- Accurate 1% guaranteed tolerance
- Zero current shutdown mode (MIC29512)
- Fixed voltage and adjustable versions
Features:

- 5A minimum guaranteed output current
- 400mV dropout voltage
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V conversion
- 1% initial accuracy
- Low ground current
- Current limiting and thermal shutdown
- Reverse battery and reverse lead insertion protection
- Reverse leakage protection
- Fast transient response
- TO-263 and TO-220 packages
- TTL/CMOS-compatible enable pin (MIC39501 only)
- Error flag output (MIC39501 only)
- Ceramic capacitor stable (See application information)
Features:

- High current capability
  - 3A over full temperature range
- Low dropout voltage of 450mV at full load
- Low ground current
- Accurate 1% guaranteed tolerance
- Extremely fast transient response
- Zero-current shutdown mode
- Error flag signals output out-of-regulation
- Adjustable output voltage
- Available in TO-263-L and TO-252-5L packages
Features:

- Low cost versions of MIC29300 family
- Fast transient response
- 3A current over full temperature range
- 600mV dropout voltage at full load
- Low ground current
- Accurate 1% guaranteed tolerance
- Zero current shutdown mode (MIC29312)
- Fixed voltage and adjustable versions
Features:

- 3.0A minimum guaranteed output current
- Ideal for 3.0V to 2.5V conversion
- Ideal for 2.5V to 1.8V conversion
- 1% initial accuracy
- Low ground current
- 550mV maximum dropout voltage over temperature
- Current limiting and thermal shutdown
- Reverse battery protection
- Reverse leakage protection
- Fast transient response
- TO-263 (D²Pak) and TO-220 packaging
- TTL/CMOS compatible enable pin (MIC39301/2 only)
- Error flag output (MIC39301 only)
- Adjustable output (MIC39302 only)
Features:

- 1.5A minimum guaranteed output current
- 500mV maximum dropout voltage over temperature
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5 to 1.8V or 1.65V conversion
- 1% initial accuracy
- Low ground current
- Current limiting and thermal shutdown
- Reverse battery and reverse lead insertion protection
- Reverse leakage protection
- TTL/CMOS-compatible enable pin (MIC39151/2 only)
- Error flag output (MIC39151 only)
- Adjustable output (MIC39152 only)
- Power D-Pak package (TO-252) Adjustable only
- Power D²Pak Package (TO-263)
Features:

- Fixed and adjustable output voltages to 1.24V
- 410mV typical dropout at 1A
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V conversion
- 1A minimum guaranteed output current
- 1% initial accuracy
- Low ground current
- Current limiting and thermal shutdown
- Reversed-battery protection
- Reversed-leakage protection
- Fast transient response
- Low-profile SOT-223 package
- Power SO-8 package
Features:

- Fixed and adjustable output voltages to 1.24V
- 280mV typical dropout at 750mA
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V or 1.65V conversion
- Stable with ceramic capacitor
- 750mA minimum guaranteed output current
- 1% initial accuracy
- Low ground current
- Current limiting and thermal shutdown
- Reverse battery protection
- Reverse leakage protection
- Fast transient response
- Low-profile MSOP-8
Features:

- Fixed and adjustable output voltages to 1.24V
- 280mV typical dropout at 750mA
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V or 1.65V conversion
- Stable with ceramic capacitor
- 750mA minimum guaranteed output current
- 1% initial accuracy
- Low ground current
- Current limiting and thermal shutdown
- Reverse battery protection
- Reverse leakage protection
- Fast transient response
- Low-profile MSOP-8
Features:

- Low 300mV typical dropout voltage at full load
- Extremely tight load and line regulation
- Current and thermal limiting
- Reversed battery protection
- TO-220 and TO-263 packages
- Low temperature coefficient
- Guaranteed 500mA output over the full operating temperature range
- No-load stability
- Low noise output
Features:

- Error flag indicates undervoltage fault
- Low 500mV maximum dropout voltage at full load
- Extremely tight load and line regulation
- Tiny SOT-23-5 and MM8® power MSOP-8 package
- Low noise output
- Low temperature coefficient
- Current and thermal limiting
- Reversed battery protection
- Guaranteed 500mA peak output over the full operating temperature range
- CMOS/TTL-compatible enable/shutdown control
- Near-zero shutdown current
Features:

- Low 500mV maximum dropout voltage at full load
- Extremely tight load and line regulation
- Ultra-low noise output
- Low temperature coefficient
- Current and thermal limiting
- Tiny SOT-23-5 and MM8® power MSOP-8 package
- 500mA output current capability
  - SOT-23-5 package - 500mA peak
  - 2mm x 2mm MLF® and Thin MLF® packages - 500mA continuous
  - MSOP-8 package - 500mA continuous
- Reversed battery protection
- CMOS/TTL-compatible enable/shutdown control
- Near-zero shutdown current
Features:

- Ultra-low noise output
- High output voltage accuracy
- Guaranteed 180mA output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- Reverse battery protection
- Zero off-mode current state
- Logic-controlled electronic enable
Features:

- Ultra-low noise output
- High output voltage accuracy
- Guaranteed 150mA output
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- Reverse battery protection
- Zero off-mode current
- Logic-controlled electronic enable
Features:

- Error flag indicates undervoltage fault
- High output voltage accuracy
- Guaranteed 150mA output
- Ultra-low noise output (8-pin versions)
- Low quiescent current
- Low dropout voltage
- Extremely tight load and line regulation
- Very low temperature coefficient
- Current and thermal limiting
- Reversed battery protection
- Zero off-mode current
- Logic-controlled electronic enable
Features:
- Wide input voltage range: 2.3V to 16V
- High output accuracy of ±2.0% over temperature
- Guaranteed 150mA output
- Very low ground current: 29µA
- Low dropout voltage of 310mV at 150mA
- μCap: stable with ceramic or tantalum capacitors
- Excellent line and load regulation specifications
- Reverse battery protection
- Reverse leakage protection
- Zero off-mode current
- Thermal shutdown and current limit protection
- IttyBitty® SOT-23-5 package
Features:
- Tiny 4-lead and 5-lead surface-mount packages
- Wide selection of output voltages
- Guaranteed 80mA output
- Low quiescent current
- Low dropout voltage
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
- Zero off-mode current
- Logic-controlled shutdown
- Stability with low-ESR ceramic capacitors
MIC5213
Teeny™ SC-70 µCap LDO

Features:

- Teeny™ SC-70 package
- Wide selection of output voltages
- Guaranteed 80mA output
- Low quiescent current
- Low dropout voltage
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
- Zero off-mode current
- Logic-controlled shutdown
- Stability with low-ESR ceramic capacitors

Online Datasheet
Features:

- Extremely low quiescent current: only 0.65µA
- **No output capacitor requirement**
- Stable with ceramic or tantalum capacitors
- IttyBitty® SOT-23-5 surface-mount package
- 10mA output drive
- Low 150mV at 10mA dropout voltage
- Tight load and line regulation
- Low temperature coefficient
- Logic-level enable input
Features:

- 5A minimum guaranteed output current
- 500mV maximum dropout voltage
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V, 1.65V, or 1.5V conversion
- Stable with ceramic or tantalum capacitor
  - $V_{IN}$: 2.3V to 6.0V
- ±1.0% initial output tolerance
- Fixed and adjustable output voltages:
  - MIC37501 - 7 terminal fixed voltage
  - MIC37502 - 5 (TO-263) and 7 (SPAk) terminal adjustable voltage
- Excellent line and load regulation specifications
- Logic controlled shutdown
- Thermal shutdown and current-limit protection
- Reverse leakage protection
- Low-profile S-Pak and TO-263 packages
Features:

- Input voltage range: 2.7V to 6.0V
  - $V_{\text{IN}}$: 1.4V to 6V
  - $V_{\text{BIAS}}$: 3V to 6V
- Stable with 10μF ceramic output capacitor
- ±1.0% initial output tolerance
- Maximum dropout ($V_{\text{IN}} - V_{\text{OUT}}$) is 500mV over temperature
- Adjustable output voltage down to 0.7V
- Ultra-fast transient response (Up to 10MHz bandwidth)
- Excellent line and load regulation specifications
- Logic controlled shutdown option
- Thermal shutdown and current limit protection
- Thin 7-pin S-Pak package
- TO-263 7-pin package
- -40°C to +125°C operating junction temperature range
Features:

- Input voltage range:
  - $V_{IN}$: 1.4V to 6.5V
  - $V_{BIAS}$: 3.0V to 6.5V
- Stable with 1µF ceramic capacitor
- ±1% initial tolerance
- Maximum dropout voltage ($V_{IN} - V_{OUT}$) of 500mV over temperature
- Adjustable output voltage down to 0.9V
- Ultra-fast transient response (Up to 10MHz bandwidth)
- Excellent line and load regulation specifications
- Logic controlled shutdown option
- Thermal shutdown and current limit protection
- Power S-Pak package
- Junction temperature range: -40°C to +125°C
Features:

- Input voltage range:
  - $V_{IN}$: 1.4V to 6.5V
  - $V_{BIAS}$: 3.0V to 6.5V
- Stable with 1µF ceramic capacitor
- ±1% initial tolerance
- Maximum dropout voltage ($V_{IN} - V_{OUT}$) of 400mV over temperature
- Adjustable output voltage down to 0.9V
- Ultra fast transient response (Up to 10MHz bandwidth)
- Excellent line and load regulation specifications
- Power D-Pak package (TO-252)
- Thermal shutdown and current limit protection
- Junction temperature range: -40°C to +125°C
**Features:**

- Ideal for 3.0V to 2.5V conversion
- Stable with ceramic or tantalum capacitor
- Wide input voltage range:
  - $V_{IN}$: 2.25V to 6.0V
- Excellent line and load regulation specifications
- 3.0A minimum guaranteed output current
- Ideal for 2.5V to 1.8V, 1.65V, or 1.5V conversion
- 600mV maximum dropout voltage over temperature
- Logic-controlled shutdown
- Thermal shutdown and current limit protection
- Reverse leakage protection
- -40°C to +125°C junction temperature
- Power D-Pak package (TO-252)
Features:

- 3.0A minimum guaranteed output current
- 500mV maximum dropout voltage over temperature
- Ideal for 3.0V to 2.5V conversion
- Ideal for 2.5V to 1.8V, 1.65V, or 1.5V conversion
- Stable with ceramic or tantalum capacitor
- Wide input voltage range:
  - $V_{IN}$: 2.25V to 6.0V
  - ±1.0% initial output tolerance
- Fixed and adjustable output voltages:
  - MIC37300 3-pin fixed voltages
  - MIC37301 5-pin S-Pak or 8-pin ePad SOIC fixed voltages with flag
  - MIC37302 5-pin adjustable voltage
  - MIC37303 8-pin ePad SOIC adjustable voltage with flag
- Thermal shutdown and current limit protection
- Reverse leakage protection
Features:

- Fast transient response
- 3A output current over full temperature range
- 600mV dropout voltage at full load
- Low ground current
- 3% total accuracy
- Zero off-mode current state
- Thermal shutdown
- Current limiting
- Reversed battery protection
- Fixed 5.1V output
Features:

- 2.5A minimum guaranteed output current
- Ideal for 3.3V to 1.8V conversion
- Stable with ceramic or tantalum capacitor
- ±2.0% initial output tolerance
- Dropout voltage is 550mV at 2.5A
- Excellent line and load regulation specifications
- Logic controlled shutdown
- Thermal shutdown and current limit protection
- Reverse leakage protection
- S-Pak and TO-263 packages
Features:

- Input voltage range: 2.7V to 6.0V
  - \( V_{\text{IN}} \): 1.4V to 6.5V
  - \( V_{\text{BIAS}} \): 3.0V to 6.5V
- Stable with 1\(\mu\)F ceramic output capacitor
- ±1.0% initial output tolerance
- Maximum dropout (\( V_{\text{IN}} - V_{\text{OUT}} \)) is 500mV over temperature
- Adjustable output voltage down to 0.9V
- Ultra-fast transient response (up to 10MHz bandwidth)
- Excellent line and load regulation specifications
- Logic-controlled shutdown option
- Thermal shutdown and current limit protection
- Thin 5-pin S-Pak package
- -40ºC to +125ºC operating junction temperature range
Features:

- 1.5A minimum guaranteed output current
- 500mV maximum dropout voltage over temperature
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V, 1.65V, or 1.5V conversion
- Stable with ceramic or tantalum capacitor
- Wide input voltage range
  - $V_{\text{IN}}$: 2.25V to 6.0V
- ±1.0% initial output tolerance
- Fixed and adjustable output voltages
  - MIC37150 - 3-pin fixed voltages
  - MIC37151 - 5-pin S-Pak or 8-pin ePad SOIC
- Fixed voltages with flag
  - MIC37152 - 5-pin adjustable voltage
  - MIC37153 - 8-pin adjustable voltage with flag
- Thermal shutdown and current limit protection
- Low profile 3 or 5-pin S-Pak packages or 8-pin ePad SOIC
Features:

- Input voltage range:
  - $V_{IN}$: 1.4V to 6.5V
  - $V_{BIAS}$: 3.0V to 6.5V
- Stable with 1µF ceramic capacitor
- ±1% initial tolerance
- Maximum dropout voltage ($V_{IN} - V_{OUT}$) of 500mV over temperature
- Adjustable output voltage down to 0.9V
- Ultra fast transient response (up to 10MHz bandwidth)
- Excellent line and load regulation specifications
- Power D-Pak package (TO-252)
- Thermal shutdown and current limit protection
- Junction temperature range: -40°C to +125°C
Features:

- Input voltage range:
  - $V_{\text{IN}}$: 1.4V to 6.5V
  - $V_{\text{BIAS}}$: 3.0V to 6.5V
- Stable with 1µF ceramic capacitor
- ±1% initial tolerance
- Maximum dropout voltage ($V_{\text{IN}} - V_{\text{OUT}}$) of 500mV over temperature
- Adjustable output voltage down to 0.9V
- Ultra fast transient response (up to 10MHz bandwidth)
- Excellent line and load regulation specifications
- Logic-controlled shutdown option
- Thermal shutdown and current limit protection
- Power MSOP-8 and S-Pak packages
- Junction temperature range: -40°C to +125°C
Features:

- 1.5A minimum guaranteed output current
- Stable with ceramic or tantalum capacitor
- Wide input voltage range
  - \( V_{\text{IN}} \): 2.25V to 6.0V
- \( \pm 1.0\% \) initial output tolerance
- 600mV maximum dropout voltage over temperature
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V, 1.65V, or 1.5V conversion
- Excellent line and load regulation specifications
- Logic controlled shutdown
- Thermal shutdown and current limit protection
- Reverse-leakage protection
- -40°C to +125°C junction temperature
- Power D-Pak package (TO-252)
Features:

- Fixed and adjustable output voltages to 1.24V
- µCap Regulator, 10µF ceramic output capacitor stable
- 280mV typical dropout at 1A
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V, 1.65V, or 1.5V conversion
- 1A minimum guaranteed output current
- 1% initial accuracy
- Low ground current
- Current limiting and thermal shutdown
- Reverse leakage protection
- Fast transient response
- Low-profile SOT-223 package
- Power SO-8 package
- S-PAK package (MIC37102 only)
Features:

- Fixed and adjustable output voltages to 1.24V
- 280mV typical dropout at 750mA
  - Ideal for 3.0V to 2.5V conversion
  - Ideal for 2.5V to 1.8V or 1.65V conversion
- Stable with ceramic capacitor
- 750mA minimum guaranteed output current
- 1% initial accuracy
- Low ground current
- Current limiting and thermal shutdown
- Reverse leakage protection
- Fast transient response
- Low-profile power MSOP-8 package
MIC5353
500mA LDO in 1.6mm x 1.6mm Package

Features:

- 500mA guaranteed output current
- Input voltage range: 2.6V to 6V
- Ultra-low dropout voltage: 160mV at 500mA
- ±2% initial accuracy
- Ultra-low output noise: 30µVrms
- Low quiescent current: 90µA
- Stable with ceramic output capacitors
- 35µs turn-on time
- Thermal shutdown and current limit protection
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® lead-less package
MIC5249
300mA μCap LDO with Programmable Power-On Reset Delay

Features:

- 300mA output current
- High PSRR: 65dB at 120Hz
- Stable with ceramic output capacitor
- Power-on reset output with adjustable delay time
- High output accuracy:
  - ±1.0% initial accuracy
  - ±3.0% over temperature
- Low dropout voltage: 400mV at 300mA
- Low quiescent current: 85mA
- Zero off-mode current state
- Thermal shutdown protection
- Current limit protection
- Tiny MSOP-8 package
Features:

• Input voltage range: 2.7V to 6.0V
• PSRR: 70dB at 1kHz
• Low output noise: 30µVrms
• Stability with ceramic output capacitors
• Low dropout: 300mV at 300mA
• High output accuracy:
  • 1.5% initial accuracy
  • 3.0% over temperature
• Low quiescent current: 105µA
• Tight load and line regulation
• TTL logic-controlled enable input
• Zero off-mode current state
• Thermal shutdown and current limit protection
MIC5318
High Performance 300mA µCap ULDO

Features:

• Ultra-low dropout voltage: 110mV at 300mA
• Input voltage range: 2.3V to 6.0V
• 300mA guaranteed output current
• Stable with ceramic output capacitors
• Ultra-low output noise: 30µVrms
• Low quiescent current: 85µA total
• High PSRR: >70dB at 1kHz
• Less than 35µs turn-on time
• High output accuracy:
  • ± 2% initial accuracy
  • ± 3% over temperature
• Thermal shutdown and current limit protection
• Tiny 6-pin 1.6mm x 1.6mm Thin MLF® package
• Thin SOT23-5 package
Features:

- Ultra-low noise
- Low voltage outputs
- Load-independent, ultra-low ground current: 85mA
- 150mA output current
- Current limiting
- Thermal shutdown
- Tight load and line regulation
- Zero off-mode current
- Stability with low-ESR capacitors
- Fast transient response
- Logic-controlled enable input
MIC5248
150mA µCap CMOS LDO with Power Good

Features:

- Power Good indicator
- Load-independent, ultra-low ground current: 100µA
- 150mA output current
- Current limiting
- Thermal shutdown
- Tight load and line regulation
- Zero off-mode current
- Stability with low-ESR capacitors
- Fast transient response
- TTL logic-controlled enable input
Features:

- Ultra-low input voltage range: 1.5V to 6V
- Low dropout voltage: 310mV at 150mA
- High output accuracy: ±2.0% over temperature
- μCap: stable with ceramic or tantalum capacitors
- Excellent line and load regulation specifications
- Zero off-mode current
- Ultra-low output voltage: 1.1V minimum output voltage
- Reverse leakage protection
- Thermal shutdown and current limit protection
- IttyBitty® SOT-23-5 package
Features:

- Input voltage range: 2.7V to 6.0V
- PSRR equals 50dB at $V_O + 0.3V$
- Ultra-low output noise: 30µV$_{\text{rms}}$
- Stability with ceramic output capacitors
- Ultra-low dropout: 135mV at 150mA
- High output accuracy:
  - 1.0% initial accuracy
  - 2.0% over temperature
- Low quiescent current: 90µA
- Tight load and line regulation
- TTL logic-controlled enable input
- Zero off-mode current
- Thermal shutdown and current limit protection
Features:

- Input voltage range: 2.7V to 6.0V
- Thin SOT package: 1mm height SOT-23-5
- Ultra-low output noise: 30µV(rms)
- Stability with ceramic output capacitors
- Ultra-low dropout: 135mV at 150mA
- High output accuracy:
  - 1.0% initial accuracy
  - 2.0% over temperature
- Low quiescent current: 90µA
- Tight load and line regulation
- TTL logic-controlled enable input
- Zero off-mode current
- Thermal shutdown and current limit protection
Features:

- Input voltage range: 2.7V to 6.0V
- Thin SOT package: 1mm height
- Error flag indicates fault condition
- Stable with ceramic output capacitor
- Ultra-low dropout: 135mV at 150mA
- High output accuracy:
  - 1.0% initial accuracy
  - 2.0% over temperature
- Low quiescent current: 90µA
- Tight load and line regulation
- Thermal shutdown and current limit protection
- Zero off-mode current
- TTL logic-controlled enable input
Features:

- Power Good indicator
- Load-independent, ultra-low ground current: 100mA
- 150mA output current
- Current limiting
- Thermal shutdown
- Tight load and line regulation
- Zero off-mode current
- Stability with low-ESR capacitors
- Fast transient response
- TTL logic-controlled enable input
Features:

- Power Good indicator
- Load-independent, ultra-low ground current: 100mA
- 150mA output current
- Current limiting
- Thermal shutdown
- Tight load and line regulation
- Zero off-mode current
- Stability with low-ESR capacitors
- Fast transient response
- TTL logic-controlled enable input
Features:

- Tiny 1mm × 1mm Thin DFN, SOT23-5 and TSOT23-5 packages
- Wide 2.5V to 6V operating range
- 150mA guaranteed output current
- Stable with 1µF ceramic output capacitors
- Low dropout voltage: 155mV @ 150mA
- Excellent load/line transient response
- Low quiescent current: 29µA
- High PSRR: 70dB
- Thermal-shutdown and current-limit protection
Features:

- Tiny 1mm × 1mm Thin DFN, SOT23-5 and TSOT23-5 packages
- Wide 2.5V to 6V operating range
- 150mA guaranteed output current
- Stable with 1µF ceramic output capacitors
- Low dropout voltage: 155mV @ 150mA
- Excellent load/line transient response
- Low quiescent current: 29µA
- High PSRR: 70dB
- Thermal-shutdown and current-limit protection
Features:

- Tiny 1mm × 1mm Thin DFN, SOT23-5 and TSOT23-5 packages
- Wide 2.5V to 6V operating range
- 150mA guaranteed output current
- Stable with 1µF ceramic output capacitors
- Low dropout voltage: 155mV @ 150mA
- Excellent load/line transient response
- Low quiescent current: 29µA
- High PSRR: 70dB
- Thermal-shutdown and current-limit protection
Features:

- Input voltage range: 2.7V to 7.0V
- Ultra-low Iq: Only 1.8µA operating current
- Stable with 0.47µF ceramic output capacitor
- Low dropout voltage of 100mV at 10mA
- Reverse Battery Protection
- High output accuracy:
  - +2.0% initial accuracy
  - +3.0% over temperature
- Logic-Level Enable Input
- Miniature 6-pin 2mm x 2mm MLF® package
- Lead-Free Thin SOT-23-5 Package
- Tight Load and Line Regulation
Features:

- Input voltage range: $V_{\text{IN}}$: 1.65V to 5.5V
- $\pm 1.0\%$ initial output tolerance
- Adjustable output voltage down to 0.5V
- Max. dropout ($V_{\text{IN}} - V_{\text{OUT}}$) of 500mV over temperature
- Stable with 10µF ceramic output capacitor (5A)
- Excellent line and load regulation specifications
- Logic controlled shutdown
- Thermal shutdown and current limit protection
- 7-Pin S-Pak package
- -40°C to +125°C temperature junction
Features:

- Stable with 10µF ceramic capacitor
- Input voltage range: 1.65V to 5.5V
- ±2.0% output tolerance over temperature
- 4A maximum output current - peak start up
- 3A continuous operating current
- Timing controlled sequencing on/off
- Tiny 4mm x 4mm MLF® package
- Fixed and adjustable output voltages
- Maximum dropout ($V_{IN} - V_{OUT}$) of 500mV over temperature at 3A output current
- Thermal shutdown and current limit protection
- Programmable Ramp Control™ for in-rush current limiting and slew rate control of the output voltage during Turn-On and Turn-Off
- Single Master can control multiple Slave regulators with tracking output voltages
**Features:**

- Stable with 10µF ceramic capacitor
- Input voltage range: 1.65V to 5.5V
- Low 0.5V reference voltage
- ±2.0% output tolerance over temperature
- 4A output current
- Timing-controlled sequencing on/off
- Programmable Ramp Control™ for inrush current limiting and slew rate control of the output voltage during turn-on
- Power-on-reset (POR) supervisor with programmable delay time
- Single master can control multiple slave regulators with tracking output voltages
- Small 4mm × 4mm QFN package
- Maximum dropout ($V_{IN} - V_{OUT}$) of 500mV over temperature at 3A output current
- Fixed and adjustable output voltages
Features:

- Input voltage range: $V_{IN}$: 1.65V to 5.5V
- Adjustable output voltage down to 0.5V
- Stable with 10µF ceramic output capacitor
- Maximum dropout ($V_{IN} - V_{OUT}$) of 500mV over temperature
- Excellent line and load regulation
- Logic controlled shutdown
- Thermal shutdown and current limit protection
- Error flag output
- 5-Pin TO-263
- 5-Pin S-Pak package
- ePad SOIC-8 package
- 12-Pin 4mm x 4mm MLF® package (MIC69303 only)
- -40°C to +125°C junction temperature range
MIC68200
2A Sequencing LDO with Tracking and Ramp Control™

Features:

- Stable with 4.7µF ceramic capacitor
- Input voltage range: 1.65V to 5.5V
- ±1.0% initial output tolerance
- 2A maximum output current -- peak start up
- 1A continuous operating current
- Tiny 3mm x 3mm MLF® package
- Programmable Ramp Control™ for in-rush current limiting and slew rate control of the output voltage
- Power-on reset (POR) supervisor with programmable delay time
- Single master can control multiple slave regulators with tracking output voltages
- Maximum dropout ($V_{IN} - V_{OUT}$) of 500mV over temperature at 1A output current
- Fixed and adjustable output voltages
- Thermal shutdown and current limit protection
Features:

- Adjustable output voltage down to 0.5V
- Stable with 10µF ceramic output capacitor
- 10-Pin 3mm x 3mm MLF® package
- Thermal shutdown and current limit protection
- Single input voltage range: $V_{\text{IN}}$: 1.65V to 5.5V
- -40°C to +125°C junction temperature
- Excellent line and load regulation specifications
- Logic controlled shutdown
- Maximum dropout ($V_{\text{IN}} - V_{\text{OUT}}$) of 500mV over temperature
Features:

- Adjustable output voltage down to 0.5V
- Stable with 4.7µF ceramic output capacitor
- Excellent line and load regulation specifications
- Logic-controlled shutdown
- Single input voltage range: $V_{IN}$: 1.65V to 5.5V
- Maximum dropout ($V_{IN} - V_{OUT}$) of 500mV over temperature
- Thermal shutdown and current limit protection
- 10-Pin 3mm x 3mm MLF® package
- -40°C to +125°C junction temperature
Features:

- Ultra-low dropout voltage 200mV @ 500mA
- Input voltage range: 2.5 to 5.5V
- Stable with ceramic output capacitor
- Low output noise 30µV\text{rms}
- Low quiescent current of 90µA total
- High PSRR, up to 70dB @1kHz
- Fast turn-on-time 40µs typical
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Tiny 2mm x 2mm MLF® package, 500mA continuous
- Thin SOT-23-5 package, 500mA peak
Features:

- Input voltage range: 2.5V to 5.5V
- Fixed output voltages down to 1.0V
- 500mA guaranteed output current
- High output initial accuracy (±1%)
- High PSRR: 80dB
- Low quiescent current: 38µA
- Stable with 2.2µF ceramic output capacitors
- Low dropout voltage: 260mV @ 500mA
- Autodischarge and internal enable pulldown
- Thermal-shutdown and current-limit protection
- 4-pin 1mm x 1mm Thin DFN package
Features:

- Input voltage range: 2.5V to 5.5V
- Fixed output voltages down to 1.0V
- ±2% Room temperature accuracy
- Low quiescent current: 38µA
- Stable with 2.2µF ceramic output capacitors
- Low dropout voltage: 260mV @ 500mA
- Autodischarge and internal enable pulldown
- Thermal-shutdown and current-limit protection
- 6-pin 1.2mm x 1.2mm extra thin DFN package
- 6-pin 1.2mm x 1.2mm thin DFN package
**Features:**

- Wide input voltage range: 1.7V to 5.5V
- Very fast transient response
- Bias supply voltage range: 2.5V to 5.5V
- Ultra-low ground current: 35 µA typical
- 400mA maximum output current per LDO
- Thermal shutdown and current limit protection
- Tiny 6-pin 2mm x 2mm Thin MLF® package
- Ultra-low dropout voltage ULDO™: 110mV at 400mA
- Stable with 1µF ceramic output capacitor
- ±2% voltage accuracy over temperature
- Adjustable output voltage range: 0.8V to 2.0V
MIC5323
Low $V_{IN}/V_{OUT}$ 400mA ULDO with Ultra-Low $I_Q$

Features:

- Input voltage range: 2.65 to 5.5V
- Stable with ceramic output capacitor
- Ultra-low dropout voltage of 120mV at 300mA
- 300mA guaranteed output current
- Low output noise: 20µV$_{rms}$
- High PSRR: up to 80dB at 1kHz
- Less than 30µs turn-on time with $C_{BYP} = 0.1µF$
- High output accuracy: ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
- 6-pin 2mm × 2mm Thin MLF® package
- Thin SOT-23-5 package
Features:

- 2.5V to 5.5V input voltage range
- 300mA output
- High output accuracy: ±2%
- Low quiescent current: typically 38µA
- Stable with 1µF ceramic capacitors
- High PSRR: 70dB at 1kHz
- Low dropout voltage: 225mV at 300mA
- Thermal shutdown protection
- Current limit protection
- Active output discharge circuit: MIC5364
- 6-pin 1.2mm x 1.2mm Thin MLF® package
Features:

- Ultra-small 1.2mm x 1.6mm Thin MLF® package
- Low dropout voltage: 100mV at 300mA
- Output noise: 120µVrms
- Input voltage range: 2.3V to 5.5V
- 300mA guaranteed output current
- Stable with ceramic output capacitors
- Low quiescent current: 85µA total
- 35µs turn-on time
- High output accuracy:
  - ±2% initial accuracy
  - ±3% over temperature
- Thermal shutdown and current limit protection
Features:

- Input voltage range: 2.4V to 5.5V
- Ultra-low $I_Q$: only 20µA operating current
- Stable with ceramic output capacitor
- Low dropout voltage of 120mV at 300mA
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
**Features:**

- Input voltage range: 1.7V to 5.5V
- Guaranteed 300mA over temperature
- High PSRR: up to 90dB at 1kHz
- Ultra-low dropout voltage: 100mV for typical 300mA load
- Output Voltage range: 0.8V to 2.0V
- Very low ground current: 23µA under full load
- Bias supply voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitor
- 300mA maximum output current at 1.7V input voltage
- Very fast transient response ideal for digital loads
- Thermal shutdown and current limit protection
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® package
- 6-pin TSOT-23 package
Features:

- Input voltage range: 1.7V to 5.5V
- Guaranteed 300mA over temperature
- High PSRR: up to 90dB at 1kHz
- Ultra-low dropout voltage: 100mV for typical 300mA load
- Output Voltage range: 0.8V to 2.0V
- Very low ground current: 23µA under full load
- Bias supply voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitor
- 300mA maximum output current at 1.7V input voltage
- Very fast transient response ideal for digital loads
- Thermal shutdown and current limit protection
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® package
- 6-pin TSOT-23 package
Features:

- Input voltage range: 1.7V to 5.5V
- Guaranteed 300mA over temperature
- High PSRR: up to 90dB at 1kHz
- Ultra-low dropout voltage: 100mV for typical 300mA load
- Output Voltage range: 0.8V to 2.0V
- Very low ground current: 23µA under full load
- Bias supply voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitor
- 300mA maximum output current at 1.7V input voltage
- Very fast transient response ideal for digital loads
- Thermal shutdown and current limit protection
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® package
- 6-pin TSOT-23 package
MIC5309
Low $V_{IN}$ /$V_{OUT}$ 300mA High PSRR ULDO with Ultra-Low $I_Q$

Features:

- Input voltage range: 1.7V to 5.5V
- Guaranteed 300mA over temperature
- High PSRR: up to 90dB at 1kHz
- Ultra-low dropout voltage: 100mV for typical 300mA load
- Output Voltage range: 0.8V to 2.0V
- Very low ground current: 23µA under full load
- Bias supply voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitor
- 300mA maximum output current at 1.7V input voltage
- Very fast transient response ideal for digital loads
- Thermal shutdown and current limit protection
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® package
- 6-pin TSOT-23 package
Features:

- 300mA output current
- Input voltage range: 2.3V to 5.5V
- Low 24µA operating current
- Low dropout voltage of 180mV at 300mA
- Fixed output voltages
- Stable with 1µF ceramic capacitors
- Thermal shutdown and current limit protection
- Tiny 4-pin 1.2mm x 1.6mm Thin MLF® package
Features:

- 300mA output current
- Low $I_Q$: only 24µA operating current
- Low dropout voltage: 180mV at 300mA
- Active discharge when enable pin is low
- Input voltage range: 2.3V to 5.5V
- Fixed output voltages
- Stable with 1µF ceramic capacitors
- Thermal shutdown and current limit protection
- Tiny 4-pin 1.2mm x 1.6mm Thin MLF® package
MIC5501/2/3/4
300mA LDO in 1.0mm x 1.0mm DFN

Features:
- Input voltage range: 2.5V to 5.5V
- Fixed output voltages from 1.0V to 3.3V
- 300mA guaranteed output current
- High output accuracy (±2%)
- Low quiescent current: 38μA
- Stable with 1μF ceramic output capacitors
- Low dropout voltage: 160mV @ 300mA
- Output discharge circuit: MIC5502, MIC5504
- Internal enable pull-down: MIC5503, MIC5504
- Thermal-shutdown and current-limit protection
- 4-lead 1.0mm x 1.0mm Thin DFN package
- MIC5504 5-pin SOT23 package
Features:

• Input voltage range: 2.5V to 5.5V
• Fixed output voltages from 1.0V to 3.3V
• 300mA guaranteed output current
• ±1% initial output accuracy
• Stable with 1µF ceramic output capacitors
• Low dropout voltage: 160mV @ 300mA
• Output discharge circuit
• Internal enable pull-down resistor (MIC5514)
• Available in ultra-small 6-pin 1.6mm × 1.6mm Thin DFN package
Features:

- Small 2mm × 2mm DFN package
- Low dropout voltage: 100mV at 300mA
- Output noise 120µV_{RMS}
- Input voltage range: 2.3V to 5.5V
- 300mA guaranteed output current
- Stable with ceramic output capacitors
- Low quiescent current: 85µA total
- 30µs turn-on time
- High output accuracy
  - ±2% initial accuracy
  - ±3% over temperature
- Thermal shutdown and current-limit protection
Features:

- Input voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitors
- Low dropout voltage: 180mV at 150mA
- Excellent load/line transient response
- Low quiescent current: 29µA
- 200mA peak (150mA continuous) output current
- High PSRR: 65dB
- Output discharge circuit -- MIC5368
- High output accuracy: ±2% initial accuracy
- Tiny 1.6mm x 1.6mm Thin MLF® package
- Thermal shutdown and current limit protection
Features:

- 2.7V to 5.5V supply voltage
- Low 90µA quiescent current per LDO
- Thin SOT-23-5 package
- Low Noise: 57µV_{rms}
- High PSRR: 70dB at 1kHz
- Low dropout voltage: 210mV at 150mA
- Stable with ceramic output capacitors
- Independent enable pins
- Fast transient response
- Active shutdown on both outputs
Features:

- Ultra-low dropout voltage: 40mV at 150mA
- Input voltage range: 2.3V to 5.5V
- 150mA guaranteed output current
- Stable with ceramic output capacitors
- Ultra-low output noise: 30µV\text{rms}
- Low quiescent current: 85µA total
- High PSRR: up to 75dB at 1kHz
- 35µs turn-on time
- High output accuracy:
  - ±2% initial accuracy
  - ±3% over temperature
- Thermal shutdown and current limit protection
- Tiny 6-pin 1.6mm x 1.6mm MLF\textsuperscript{©} lead-less package
Features:

- Ultra-small 1.2mm x 1.6mm Thin MLF® package
- Low dropout voltage: 50mV at 150mA
- Output noise: 120µV<sub>rms</sub>
- Input voltage range: 2.3V to 5.5V
- 150mA guaranteed output current
- Stable with ceramic output capacitors
- Low quiescent current: 85µA total
- 35µs turn-on time
- High output accuracy:
  - ±2% initial accuracy
  - ±3% over temperature
- Thermal shutdown and current limit protection
Features:

- 150mA output current
- Logic-controlled selectable output voltage
- Input voltage range: 2.3V to 5.5V
- Low 24µA operating current
- Fast transition time between selected output voltages
- Stable with 1µF ceramic capacitors
- Low dropout voltage: 85mV at 150mA
- Thermal shutdown and current limit protection
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® package
Features:

- 150mA output current
- Logic-controlled selectable output voltage
- Input voltage range: 2.3V to 5.5V
- Low 24μA operating current
- Fast transition time between selected output voltages
- Stable with 1μF ceramic capacitors
- Low dropout voltage: 85mV at 150mA
- Thermal shutdown and current limit protection
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® package
MIC5305
150mA μCap Ultra-Low Dropout LDO Regulator

Features:

• Ultra-low dropout voltage: 60mV at 150mA
• Input voltage range: 2.25V to 5.5V
• Stable with ceramic output capacitor
• 150mA guaranteed output current
• Low output noise: 20µV rms
• Low quiescent current: 90µA total
• High PSRR: up to 85dB at 1kHz
• Less than 30µs turn-on time w/C_{BYP} = 0.01µF
• High output accuracy
• Thermal shutdown protection
• Current limit protection
• Tiny 6-pin 2mm x 2mm MLF® package
• Ultra-Thin 6-pin 2mm x 2mm Thin MLF® package
Features:

- Ultra-low dropout voltage: 60mV at 150mA
- Input voltage range: 2.25V to 5.5V
- Stable with ceramic output capacitor
- 150mA guaranteed output current
- Low output noise: $20\mu V_{rms}$
- Low quiescent current: 90µA total
- High PSRR: up to 85dB at 1kHz
- Less than 30µs turn-on time w/$C_{BYP} = 0.01\mu F$
- High output accuracy
- Thermal shutdown protection
- Current limit protection
- Tiny 6-pin 2mm x 2mm MLF® package
- Ultra-Thin 6-pin 2mm x 2mm Thin MLF® package
Features:

- Input voltage range: 2.25V to 5.5V
- Ultra-low $I_Q$: only 16µA operating current
- Stable with ceramic output capacitor
- Low dropout voltage: 45mV at 100mA
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
MIC5306
150mA Micropower µCap Baseband LDO

Features:

- Input voltage range: 2.25V to 5.5V
- Ultra-low $I_Q$: only 16µA operating current
- Stable with ceramic output capacitor
- Low dropout voltage: 45mV at 100mA
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
Features:

- Input voltage range: 1.6V to 5.5V
- High PSRR: up to 90dB at 1kHz
- Guaranteed 150mA over temperature
- Ultra-low dropout voltage: 45mV at 150mA
- Output voltage range: 0.8V to 2.0V
- Very low ground current: 23µA under full load
- Bias supply voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitor
- Thermal shutdown and current limit protection
- 1.6x1.6mm DFN (MLF) and SOT23-6 package
Features:

- Input voltage range: 1.6V to 5.5V
- High PSRR: up to 90dB at 1kHz
- Guaranteed 150mA over temperature
- Ultra-low dropout voltage: 45mV at 150mA
- Output voltage range: 0.8V to 2.0V
- Very low ground current: 23µA under full load
- Bias supply voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitor
- Thermal shutdown and current limit protection
- 1.6x1.6mm DFN (MLF) and SOT23-6 package
Features:

- Input voltage range: 1.6V to 5.5V
- High PSRR: up to 90dB at 1kHz
- Guaranteed 150mA over temperature
- Ultra-low dropout voltage: 45mV at 150mA
- Output voltage range: 0.8V to 2.0V
- Very low ground current: 23µA under full load
- Bias supply voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitor
- Thermal shutdown and current limit protection
- 1.6x1.6mm DFN (MLF) and SOT23-6 package
Features:

- Input voltage range: 1.6V to 5.5V
- High PSRR: up to 90dB at 1kHz
- Guaranteed 150mA over temperature
- Ultra-low dropout voltage: 45mV at 150mA
- Output voltage range: 0.8V to 2.0V
- Very low ground current: 23µA under full load
- Bias supply voltage range: 2.5V to 5.5V
- Stable with 1µF ceramic output capacitor
- Thermal shutdown and current limit protection
- 1.6x1.6mm DFN (MLF) and SOT23-6 package
Features:
- 150mA output current
- Input voltage range: 2.3V to 5.5V
- Low 24µA operating current
- Low dropout voltage of 85mV at 150mA
- Fixed output voltage
- Stable with 1µF ceramic capacitors
- Thermal shutdown and current limit protection
- Tiny 4-pin 1.2mm x 1.6mm Thin MLF® package
Features:

- Input voltage range: 2.5V to 5.5V
- 150mA guaranteed output current
- Stable with 1uF ceramic output capacitors
- Low dropout voltage: 180mV at 150mA
- Tiny 1mm x 1mm Thin MLF®, SC-70-5, and Thin SOT23-5 packages
- Excellent Load/Line Transient Response
- Low quiescent current: 32µA
- High PSRR: 70dB
- Output discharge circuit (MIC5366)
- High output accuracy:
  - ±2% initial accuracy
- Thermal shutdown and current limit protection
Features:

- Input voltage range: 2.5V to 5.5V
- 150mA guaranteed output current
- Stable with ceramic output capacitors
- Low dropout voltage: 180mV at 150mA
- Tiny 1mm x 1mm Thin MLF®, SC-70-5, and Thin SOT23-5 packages
- Excellent Load/Line Transient Response
- Low quiescent current: 32µA
- High PSRR: 70dB
- Output discharge circuit (MIC5366)
- High output accuracy:
  - ±2% initial accuracy
- Thermal shutdown and current limit protection
Features:

- Input voltage range: 2.5V to 5.5V
- 150mA guaranteed output current
- Stable with ceramic output capacitors
- Low dropout voltage: 180mV at 150mA
- Tiny 1mm x 1mm Thin MLF®, SC-70-5, and Thin SOT23-5 packages
- Excellent Load/Line Transient Response
- Low quiescent current: 32µA
- High PSRR: 70dB
- Output discharge circuit (MIC5366)
- High output accuracy:
  - ±2% initial accuracy
- Thermal shutdown and current limit protection
Features:

- Low cost 5-pin SC-70 package
- Low dropout voltage: 120mV at 150mA
- Input voltage range: 2.5V to 5.5V
- 150mA guaranteed output current
- 4-pin 1mm x 1mm Thin MLF® package -- MIC5375/6
- 8-pin 1.2mm x 1.2mm Thin MLF® package -- MIC5377/8
- Stable with 0402 ceramic capacitors as low as 1µF
- Low quiescent current: 29µA
- Fixed output voltages -- MIC5375/6
- Adjustable output -- MIC5377/8
- Output discharge circuit -- MIC5376/8
- High output accuracy:
  - ±2% initial accuracy
- Thermal shutdown and current limit protection
Features:

- Input voltage range: 2.7V to 5.5V
- Teeny™ SC-70-5 package
- Ultra-low output noise: 30µV_{rms}
- Stability with ceramic output capacitors
- 100mA continuous output current, 150mA peak current
- Ultra-low dropout: 165mV at 100mA
- High output accuracy:
  - 1.5% initial accuracy
  - 3.0% over temperature
- Low ground current 95µA
- TTL logic-controlled enable input
- Zero off-mode current
- Thermal shutdown and current limit protection
Features:

- Input voltage range:
  - $V_{\text{IN}} = 1.0\text{V to 3.8V}$
  - $V_{\text{BIAS}} = 3.0\text{V to 5.5V}$
- Stable with 1µF ceramic capacitor
- ±1% initial tolerance
- Maximum dropout voltage of 500mV over temperature
- Adjustable output voltage down to 0.5V
- Ultra-fast transient response
- Logic controlled shutdown option
- Thermal shutdown and current limit protection
- -40°C to +125°C junction temperature range
- TO-263 and 8-pin ePad SOIC
- Pin compatible upgrade to MIC49300
Features:

- Single $V_{\text{IN}}$ rail: 1.1V to 3.6V
- Soft-start control via external capacitor
- Typical dropout of 150mV at room temperature
- Output voltage adjustable down to 0.5V
- Soft-start control via external capacitor
- Excellent line and load regulation
- Logic controlled shutdown
- Thermal shutdown and current limit protection
- 10-pin 3mm x 3mm MLF® package
- 10-pin ePad MSOP package
- Junction temperature range from -40°C to +125°C
- Maximum dropout of 350mV at full load over temperature
- Soft-start control via external capacitor
Features:

- Input voltage range:
  - \( V_{\text{IN}} = 1.0\text{V} \) to \( 3.8\text{V} \)
  - \( V_{\text{BIAS}} = 3.0\text{V} \) to \( 5.5\text{V} \)
- Stable with 1\( \mu \text{F} \) ceramic capacitor
- Maximum dropout voltage of 250mV over temperature
- Adjustable output voltage down to 0.5V
- Ultra fast transient response
- Excellent line and load regulation specifications
- Logic controlled shutdown option
- Thermal shutdown and current limit protection
- Junction temperature range: -40°C to +125°C
- 8-pin EPAD SOIC
Features:

- Single $V_{IN}$ rail: 1.1V to 3.6V
- Typical dropout of 75mV at room temperature
- $C_{OUT}$ as low as 22µF (ceramic capacitor)
- Output voltage adjustable down to 0.5V
- Soft-start control via external capacitor
- Excellent line and load regulation
- Logic controlled shutdown
- Thermal shutdown and current limit protection
- 10-pin 3mm x 3mm MLF® package
- 10-pin ePad MSOP package
- Output voltage accuracy: ±2.5% over temperature
- Maximum dropout of 200mV at full load over temperature
- Junction temperature range from -40°C to +125°C
Features:

- Operating voltage range:
  - Input Supply: 1.0V to 3.6V
  - Bias Supply: 2.3V to 5.5V
- 0.8V to 2.0V output voltage range
- PSRR >50dB at 100kHz
- Stable with a 1µF ceramic output capacitor
- Low dropout voltage of 80mV at 1A
- High output voltage accuracy:
  - ±1.5% initial accuracy
  - ±2% over temperature
- UVLO on both supply voltages for easy turn-on
- ePad MSOP-8 -- small form factor power package
- Thermally enhanced 2mm x 2mm MLF® -- smallest solution
Features:

- Input voltage range: 1.0V to 3.6V
- Stable with 1µF ceramic output capacitor
- ±1.5% initial output voltage accuracy
- Bias supply voltage range: 2.3V to 5.5V
- Adjustable output voltage range: 0.4V to 2.0V
- Logic-level enable input
- 400mA maximum output current per LDO
- Very fast transient response
- UVLO on both supply packages
- Thermally enhanced 2mm x 2mm MLF® and Thin MLF® packages
- Junction temperature range of -40ºC to +125ºC
- Low dropout voltage ULDO™: 44mV at 500mA
Features:

- Input voltage range: 1.0V to 3.6V
- Stable with 1µF ceramic output capacitor
- Low dropout voltage: 49mV at 500mA
- ±2% initial output voltage accuracy over temperature
- Bias supply voltage range: 2.3V to 5.5V
- Adjustable output voltage range down to 0.4V
- Logic-level enable input
- UVLO on both supply voltages
- High bandwidth - very fast transient response
- Low shutdown current: 0.1µA typical
- Thermally enhanced 2mm x 2mm Thin DFN package
- Junction temperature range of -40°C to +125°C
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >60dB from 40kHz to 5MHz
- Rated to 500mA output current
- Current-limit and thermal-limit protected
- Ultra-small 0.84mm x 1.32mm 6-ball CSP
- 1.6mm x 1.6mm, 6-pin Thin DFN
- Logic-controlled enable pin
- -40°C to +125°C junction temperature range
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >50dB from 10Hz to 5MHz at 500mA load
- Rated to 500mA output current
- Fixed and adjustable output voltages
- Optional output auto-discharge when disabled
- Current-limit and thermal-limit protected
- Ultra-small 0.84mm x 1.32mm 6-ball CSP
- 1.6mm x 1.6mm, 6-pin Thin DFN
- -40°C to +125°C junction temperature range
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >60dB from 40kHz to 5MHz
- Rated to 200mA output current
- Current-limit and thermal-limit protected
- Ultra-small 0.88mm x 0.88mm 4-ball CSP
- 1.2mm x 1.6mm, 4-pin Thin MLF®
- Logic-controlled enable pin
- -40°C to +125°C junction temperature range
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >50dB from 10Hz to 10MHz at 200mA load
- Rated to 200mA output current
- -40°C to +125°C junction temperature range
- Fixed output voltages
- Current-limit and thermal-limit protected
- 1.2mm x 1.6mm, 4-pin Thin DFN
- 5-pin SOT-23
- Logic-controlled enable pin
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >50dB from 10Hz to 10MHz at 200mA load
- Rated to 200mA output current
- -40°C to +125°C junction temperature range
- Fixed output voltages
- Current-limit and thermal-limit protected
- 1.2mm x 1.6mm, 4-pin Thin DFN
- 5-pin SOT-23
- Logic-controlled enable pin
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >50dB from 10Hz to 10MHz at 200mA load
- Rated to 200mA output current
- -40°C to +125°C junction temperature range
- Fixed output voltages
- Current-limit and thermal-limit protected
- 1.2mm x 1.6mm, 4-pin Thin DFN
- 5-pin SOT-23
- Logic-controlled enable pin
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >50dB from 10Hz to 10MHz at 200mA load
- Rated to 200mA output current
- -40°C to +125°C junction temperature range
- Fixed output voltages
- Current-limit and thermal-limit protected
- 1.2mm x 1.6mm, 4-pin Thin DFN
- 5-pin SOT-23
- Logic-controlled enable pin
Features:

• 1.8V to 3.6V input voltage range
• Active noise rejection over a wide frequency band: >50dB from 10Hz to 10MHz at 200mA load
• Rated to 200mA output current
• -40°C to +125°C junction temperature range
• Fixed output voltages
• Current-limit and thermal-limit protected
• 1.2mm x 1.6mm, 4-pin Thin DFN
• 5-pin SOT-23
• Logic-controlled enable pin
Features:

- Stable with ceramic or tantalum capacitor
- Low dropout voltage: 500mV at 100mA
- Tight initial accuracy: ±2%
- Tight load and line regulation
- Low ground current: 35µA at load equals 100µA
- Thermal shutdown
- Current limiting
- IttyBitty® SOT-23-5 packaging
Features:

- Stable with ceramic or tantalum capacitor
- Positive and negative enable thresholds
- Low dropout voltage: 500mV at 100mA
- Low ground current: 35µA at load equals 100µA
- Tight initial accuracy: ±2%
- Tight load and line regulation
- Thermal shutdown
- Current limiting
- IttyBitty® SOT-23-5 packaging
- Zero off-mode current
Features:

- Stable with 4.7μF ceramic output capacitor
- Input voltage range: 1.65V to 5.5V
- ±1.0% initial output tolerance
- 2A maximum output current - peak start up
- 1A Continuous operating current
- Programmable Ramp Control™ for in-rush current limiting and slew rate control of the output voltage on Turn-On and Turn-Off
- Power-on Reset (POR) supervisor with programmable delay time
- Single Master can control multiple Slave regulators with tracking output voltages
- Tiny 4mm x 5mm MLF® package
- Maximum dropout (\(V_{\text{IN}} - V_{\text{OUT}}\)) of 500mV over temperature at 1A output current
- Fixed and adjustable output voltages
- Thermal shutdown and current limit protection
Features:

- 2.5V to 5.5V input voltage range
- 2% initial output accuracy
- Wide output voltage range: 1.0V to 3.3V
- Low quiescent current: 38µA per output
- Very low quiescent current in shutdown: <1µA typical
- µCap stable with 2.2µF ceramic capacitor
- Low dropout voltage: 350mV at 500mA
- Excellent load/line transient response
- Independent logic controlled enable pins
- Output discharge circuit (MIC5356)
- Current and thermal limit protection
- Power 8-pin ePad MSOP package
Features:

- 2.5V to 5.5V input voltage range
- 2% initial output accuracy
- Wide output voltage range: 1.0V to 3.3V
- Low quiescent current: 38µA per output
- Very low quiescent current in shutdown: <1µA typical
- µCap stable with 2.2µF ceramic capacitor
- Low dropout voltage: 350mV at 500mA
- Excellent load/line transient response
- Independent logic controlled enable pins
- Output discharge circuit (MIC5356)
- Current and thermal limit protection
- Power 8-pin ePad MSOP package
Features:

• 2.6V to 5.5V input voltage range
• Ultra-low output noise: 51µVrms
• ±2% initial output accuracy
• Small 8-pin ePad MSOP package
• Excellent Load/Line transient response
• Ultra-low dropout voltage: 130mV @ 500mA
• Fast start up time: 38µs
• µCap stable with 2.2µF ceramic capacitors
• Thermal shutdown protection
• Low quiescent current: 160µA with both outputs at maximum load
Features:

• 2.5V to 5.5V input voltage range
• Independent enable pins
• High output accuracy: ±2%
• Low quiescent current: 32µA per LDO
• Stable with 1µF ceramic output capacitors
• Two 200mA peak output current LDOs
• Low dropout voltage: 175mV at 150mA
• Output discharge circuit (MIC5389)
• Thermal shutdown protection
• Current limit protection
• 6-bump 1.5mm x 1.0mm WLCSP package
Features:
- Ultra-low dropout voltage ULDO 35mV @ 150mA
- High PSRR: >70dB @ 1KHz
- Ultra-low output noise: 30µV\text{rms}
- ±2% initial output accuracy
- 2.3V to 5.5V input voltage range
- Tiny 8-pin 2mm x 2mm MLF\textsuperscript{®} leadless package
- Excellent load/line transient response
- Fast start-up time: 30µs
- µCap stable with 1µF ceramic capacitor
- Thermal shutdown protection
- Low quiescent current: 75µA per output
- Current limit protection
Features:
- Ultra-low dropout voltage ULDO 35mV @ 150mA
- High PSRR: >70dB @ 1KHz
- Ultra-low output noise: 30µV_{rms}
- ±2% initial output accuracy
- 2.3V to 5.5V input voltage range
- Tiny 8-pin 2mm x 2mm MLF® leadless package
- Excellent load/line transient response
- Fast start-up time: 30µs
- µCap stable with 1µF ceramic capacitor
- Thermal shutdown protection
- Low quiescent current: 75µA per output
- Current limit protection
**Features:**

- Ultra-low dropout voltage ULDO 35mV @ 150mA
- High PSRR: >70dB @ 1KHz
- Ultra-low output noise: 30µV<sub>rms</sub>
- ±2% initial output accuracy
- 2.3V to 5.5V input voltage range
- Tiny 8-pin 2mm x 2mm MLF® leadless package
- Excellent load/line transient response
- Fast start-up time: 30µs
- µCap stable with 1µF ceramic capacitor
- Thermal shutdown protection
- Low quiescent current: 75µA per output
- Current limit protection
MIC5320
Dual High Performance 150mA µCap ULDO

Features:
- 2.3V to 5.5V input voltage range
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Independent enable pins
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® leadless package
- Low cost TSOT-23-6 package
- PSRR: >65dB on each LDO
- 150mA output current per LDO
- µCap stable with 1µF ceramic capacitor
- Low quiescent current: 85µA per output
- Fast turn-on time: 30µs
- Thermal shutdown protection
- Current limit protection
MIC5321
Dual High Performance 150mA μCap ULDO

Features:

- 2.3V to 5.5V input voltage range
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Tiny 6-pin 1.6mm x 1.6mm MLF® leadless package
- Low cost TSOT-23-6 package
- Bypass pin for improved noise performance
- High PSRR: >75dB on each LDO
- Ultra low noise output: >30µV_{rms}
- Dual 150mA outputs
- μCap stable with 1µF ceramic capacitor
- Low quiescent current: 150µA per output
- Fast turn-on time: 45µs
- Thermal shutdown protection
- Current limit protection
Features:

- 2.3V to 5.5V input voltage range
- Dual 150mA outputs
- µCap stable with 1µF ceramic capacitor
- Low quiescent current: 150µA
- Fast turn-on time: 45µs
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® leadless package
- Bypass pin for improved noise performance
- High PSRR: >75dB on each LDO
- Ultra-low noise output: > 30µV rms
- Thermal shutdown protection
- Current limit protection
MIC5320
Dual High Performance 150mA μCap ULDO

Features:
- 2.3V to 5.5V input voltage range
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Independent enable pins
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® leadless package
- Low cost TSOT-23-6 package
- PSRR: >65dB on each LDO
- 150mA output current per LDO
- μCap stable with 1μF ceramic capacitor
- Low quiescent current: 85μA per output
- Fast turn-on time: 30μs
- Thermal shutdown protection
- Current limit protection
Features:

- 2.3V to 5.5V input voltage range
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Tiny 6-pin 1.6mm x 1.6mm MLF® leadless package
- Low cost TSOT-23-6 package
- Bypass pin for improved noise performance
- High PSRR: >75dB on each LDO
- Ultra low noise output: > 30µV rms
- Dual 150mA outputs
- µCap stable with 1µF ceramic capacitor
- Low quiescent current: 150µA per output
- Fast turn-on time: 45µs
- Thermal shutdown protection
- Current limit protection
MIC5322
Dual, High Performance 150mA µCap ULDO

Features:
- 2.3V to 5.5V input voltage range
- Dual 150mA outputs
- µCap stable with 1µF ceramic capacitor
- Low quiescent current: 150µA
- Fast turn-on time: 45µs
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® leadless package
- Bypass pin for improved noise performance
- High PSRR: >75dB on each LDO
- Ultra-low noise output: > 30µV_{rms}
- Thermal shutdown protection
- Current limit protection
Features:

- 2.3V to 5.5V input voltage range
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Independent enable pins
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® leadless package
- Low cost TSOT-23-6 package
- PSRR: >65dB on each LDO
- 150mA output current per LDO
- μCap stable with 1μF ceramic capacitor
- Low quiescent current: 85μA per output
- Fast turn-on time: 30μs
- Thermal shutdown protection
- Current limit protection
Features:

- 2.3V to 5.5V input voltage range
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Tiny 6-pin 1.6mm x 1.6mm MLF® leadless package
- Low cost TSOT-23-6 package
- Bypass pin for improved noise performance
- High PSRR: >75dB on each LDO
- Ultra low noise output: > 30µV\text{rms}
- Dual 150mA outputs
- µCap stable with 1µF ceramic capacitor
- Low quiescent current: 150µA per output
- Fast turn-on time: 45µs
- Thermal shutdown protection
- Current limit protection
Features:

- 2.3V to 5.5V input voltage range
- Dual 150mA outputs
- µCap stable with 1µF ceramic capacitor
- Low quiescent current: 150µA
- Fast turn-on time: 45µs
- Ultra-low dropout voltage ULDO: 35mV @ 150mA
- Tiny 6-pin 1.6mm x 1.6mm Thin MLF® leadless package
- Bypass pin for improved noise performance
- High PSRR: >75dB on each LDO
- Ultra-low noise output: > 30µV<sub>rms</sub>
- Thermal shutdown protection
- Current limit protection
Features:

- 2.5V to 5.5V input voltage range
- Two 150mA output current LDOs
- High output accuracy
  - ±2% initial accuracy
- Low quiescent current 32µA per LDO
- Stable with 1µF ceramic output capacitors
- Independent enable pins
- Low dropout voltage: 155mV at 150mA
- Thermal shutdown protection
- Current limit protection
- Output discharge circuit (MIC5371)
- 6-pin 1.6mm x 1.6mm Thin MLF® package
Features:

- 6-pin 1mm x 1mm Thin MLF® package
- 2.5V to 5.5V input voltage range
- 150mA output current per LDO
- High output accuracy ±1% typical
- Low quiescent current 32µA per LDO
- Stable with 0402 1µF ceramic output capacitors
- Low dropout voltage: 155mV at 150mA
- Output discharge circuit (MIC5381)
- Independent enable pins
- Thermal shutdown protection
- Current limit protection
MIC5370/1
High-Performance Dual 150mA LDO 1.6mm x 1.6mm Thin MLF®

Features:

• 2.5V to 5.5V input voltage range
• Two 150mA output current LDOs
• High output accuracy
  • ±2% initial accuracy
• Low quiescent current 32µA per LDO
• Stable with 1µF ceramic output capacitors
• Independent enable pins
• Low dropout voltage: 155mV at 150mA
• Thermal shutdown protection
• Current limit protection
• Output discharge circuit (MIC5371)
• 6-pin 1.6mm x 1.6mm Thin MLF® package
MIC5380/1
High Performance Dual 150mA LDO 1mm x 1mm Thin MLF®

Features:

- 6-pin 1mm x 1mm Thin MLF® package
- 2.5V to 5.5V input voltage range
- 150mA output current per LDO
- High output accuracy ±1% typical
- Low quiescent current 32µA per LDO
- Stable with 0402 1µF ceramic output capacitors
- Low dropout voltage: 155mV at 150mA
- Output discharge circuit (MIC5381)
- Independent enable pins
- Thermal shutdown protection
- Current limit protection
Features:

- 2.7V to 5.5V supply voltage
- Low 90µA quiescent current per LDO
- Tiny 2.5mm x 2.5mm MLF® package
- Low noise: 57µV_{rms}
- High PSRR: 70dB at 1kHz
- Low dropout voltage: 210mV at 150mA
- Stable with ceramic output capacitors
- Independent enable pins
- Fast transient response
- Active shutdown on both outputs
Features:

- 2.5V to 5.5V input voltage range
- Two 150mA output current LDOs
- Independent enable pins
- High output accuracy: ±2% initial accuracy
- Low quiescent current (32µA per LDO)
- Stable with 1µF ceramic output capacitors
- Low dropout voltage (155mV at 150mA)
- Thermal-shutdown protection
- Current-limit protection
- Internal 25Ω output discharge circuit (MIC5393)
- Tiny 6-pin 1.2mm x 1.2mm Thin DFN package
Features:

- 2.5V to 5.5V input voltage range
- Two 150mA output current LDOs
- Independent enable pins
- High output accuracy: ±2% initial accuracy
- Low quiescent current (32µA per LDO)
- Stable with 1µF ceramic output capacitors
- Low dropout voltage (155mV at 150mA)
- Thermal-shutdown protection
- Current-limit protection
- Internal 25Ω output discharge circuit (MIC5393)
- Tiny 6-pin 1.2mm x 1.2mm Thin DFN package
Features:

- Input voltage range: 2.25V to 5.5V
- LowQ® Mode
  - 7µA total quiescent current
  - 10mA output current capable LowQ® mode
  - Logic level control with external pin
- Stable with ceramic output capacitor
- 2 LDO outputs: 300mA each
- Tiny 10-pin 3mm x 3mm MLF® package
- Low dropout voltage of 60mV @ 150mA
- Ultra-low quiescent current of 28µA total in full current mode
- High output accuracy
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
Features:

- Input voltage range: 2.25V to 5.5V
- LowQ® Mode
  - 7µA total quiescent current
  - 10mA output current capable LowQ® mode
  - Logic level control with external pin
- Stable with ceramic output capacitor
- 2 LDO outputs: 300mA each
- Integrated power-on reset (POR) with adjustable delay time
- Tiny 3mm x 3mm MLF®-10 package
- Low dropout voltage of 60mV @ 150mA
- Ultra-low quiescent current of 28µA total in full current mode
- High output accuracy
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protections
Features:

- 300mA output current for each LDO
- Very fast transient response
- Low output voltage range: 0.8V to 2.0V
- Stable with 1µF ceramic output capacitors
- Dual low voltage regulator inputs: 1.7V to 5.5V
- Ultra-low dropout voltage of 85mV @ 300mA
- Thermal shutdown and current limit protection
- Tiny 10-pin 2mm x 2mm Thin MLF® package
Features:

- 300mA output current for each LDO
- Low output voltage range: 0.8V to 2.0V
- Ultra-low dropout voltage of 85mV @ 300mA
- Power on Reset output with adjustable delay
- Stable with 1µF ceramic output capacitors
- Very fast transient response
- Thermal shutdown and current limit protection
- Tiny 12-pin 2.5mm x 2.5mm Thin MLF® package
- Dual low voltage regulator inputs: 1.7V to 5.5V
Features:

- 300mA output current for each LDO
- Voltage select function
- Dual low voltage regulator inputs: 1.7V to 5.5V
- Low output voltage range: 0.8V to 2.0V
- Ultra-low dropout voltage of 85mV @ 300mA
- Stable with 1 µF ceramic output capacitors
- Very fast transient response
- Thermal shutdown and current limit protection
- Tiny 10-pin 2mm x 2mm Thin MLF® package
Features:

- 300mA output current for each LDO
- Voltage select function
- Low output voltage range: 0.8V to 2.0V
- Very fast transient response
- Dual low voltage regulator inputs: 1.7V to 5.5V
- Ultra-low dropout voltage of 85mV @ 300mA
- Power on Reset output with adjustable delay
- Stable with 1µF ceramic output capacitors
- Thermal shutdown and current limit protection
- Tiny 12-pin 2.5mm x 2.5mm Thin MLF® package
Features:

- 2.3V to 5.5V input voltage range
- High PSRR: >70dB @ 1KHz
- Ultra-low output noise: 30µV_{rms}
- ±2% initial output accuracy
- Fast start-up time: 30µs
- Tiny 8-pin 2mm x 2mm MLF® leadless package
- Excellent Load/Line transient response
- Ultra-low dropout voltage ULDO 75mV @ 300mA
- 300mA output current per LDO
- Thermal shutdown protection
- Low quiescent current: 75µA per output
- Current limit protection
Features:

- 2.3V to 5.5V input voltage range
- 300mA output current per LDO
- Very low quiescent current: 25 µA per LDO
- High PSRR: >65dB on each LDO
- Stable with 1 µF ceramic output capacitors
- Tiny 8-pin 2mm x 2mm Thin MLF® package
- Ultra-low dropout voltage: 120mV @ 300mA
- Low output voltage noise: 50 µV_{rms}
- Thermal shutdown protection
- Current limit protection
Features:

- POR output with programmable delay on LDO2
- 300mA output current per LDO
- Very low quiescent current: 25 µA per LDO
- High PSRR: >65dB on each LDO
- 2.3V to 5.5V input voltage range
- Stable with 1µF ceramic output capacitors
- Tiny 8-pin 2mm x 2mm Thin MLF® package
- Ultra-low dropout voltage: 120mV @ 300mA
- Low output voltage noise: 50 µV_{rms}
- Thermal shutdown protection
- Current limit protection
Features:

- 2.3V to 5.5V input voltage range
- 300mA output current per LDO
- Very low quiescent current: 25µA per LDO
- Stable with 1µF ceramic output capacitors
- POR output with programmable delay for each LDO
- High PSRR: >65dB on each LDO
- Tiny 10-pin 2.5mm x 2.5mm Thin MLF® package
- Ultra-low dropout voltage: 120mV @ 300mA
- Low output voltage noise: 50 µV_{rms}
- Thermal shutdown protection
- Current limit protection
Features:

- 2.3V to 5.5V input voltage range
- Ultra-low dropout voltage: 75mV at 300mA
- Independent enable pins
- Ultra Thin 1.6mm x 1.6mm 6-pin MLF® package
- High PSRR: >65dB
- 300mA output current per LDO
- μCap Stable with 1μF ceramic capacitor
- Low quiescent current: 90μA/LDO
- Fast turn-on time: 30μs
- Low output voltage noise: 24μV_{rms}
- Thermal shutdown protection
- Current limit protection
Features:

- 2.5V to 5.5V input voltage range
- Two 300mA outputs
- High output accuracy: 2%
- Low quiescent current: 70µA total
- Stable with ceramic output capacitors
- Independent enable pins
- Low dropout voltage: 220mV at 300mA
- Low output noise
- Thermal shutdown protection
- Current limit protection
- Output discharge circuit (MIC5339)
- 6-pin 1.6mm x 1.6mm Thin MLF® package
Features:
- 2.5V to 5.5V input voltage range
- Independent power inputs
- Output voltage range from 1V to 3.3V
- Two 300mA outputs
- High output accuracy (±2%)
- Low quiescent current: 37µA typical/LDO
- Stable with 1µF ceramic output capacitors
- Low dropout voltage (160mV at 300mA)
- Internal enable pull-down (MIC5398, MIC5399)
- Output discharge circuit (MIC5397, MIC5399)
- Thermal-shutdown protection
- Current-limit protection
- 8-pin 1.2mm x 1.6mm Extra Thin DFN package
Features:

- Input voltage range: 2.7V to 6.0V
- Dual, independent 150mA LDOs
- Error flags indicate fault condition
- Stable with ceramic output capacitor
- Ultra-low dropout: 135mV @ 150mA
- High output accuracy:
  - 1.0% initial accuracy
  - 2.0% over temperature
- Low quiescent current: 90µA each LDO
- Tight load and line regulation
- Thermal shutdown and current limit protection
- Zero off-mode current
- TTL logic-controlled enable input
- MSOP-10 package
Features:
- Fused lead frame SOIC-8
- Up to 500mA per regulator output
- Low quiescent current
- Low dropout voltage
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
Features:

- Fused lead frame SOIC-8
- Up to 500mA per regulator output
- Low quiescent current
- Low dropout voltage
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
Features:

- Micrel Mini 8®; MSOP package
- Up to 150mA per regulator output
- Low quiescent current
- Low dropout voltage
- Wide selection of output voltages
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
- Zero off-mode current
- Logic-controlled electronic enable
Features:

- Micrel Mini 8®; MSOP package
- Up to 150mA per regulator output
- Low quiescent current
- Low dropout voltage
- Wide selection of output voltages
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
- Zero off-mode current
- Logic-controlled electronic enable
Features:

- Micrel Mini 8®; MSOP package
- Up to 150mA per regulator output
- Low quiescent current
- Low dropout voltage
- Wide selection of output voltages
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
- Zero off-mode current
- Logic-controlled electronic enable
Features:

- Stable with low-value ceramic or tantalum capacitors
- Independent logic controls
- Low quiescent current
- Low dropout voltage
- Mixed voltages available
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
- Zero off-mode current
- Dual regulator in tiny SOT-23 package
- 2.5V to 16V input range
Features:

- Micrel Mini 8® MSOP package
- Guaranteed 50mA output
- Low quiescent current
- Low dropout voltage
- Wide selection of output voltages
- Tight load and line regulation
- Low temperature coefficient
- Current and thermal limiting
- Reversed input polarity protection
- Zero off-mode current
- Logic-controlled electronic enable
Features:

- High output voltage accuracy
- Variety of output voltages
- Up to 100mA of continuous output current
- Low ground current
- Low dropout voltage
- Excellent line and load regulations
- Extremely low temperature coefficient
- Current and thermal limit protections
- Reverse-battery protection
- Zero off-mode current
- Logic-controlled electronic shutdown
- 8-pin SOIC package
Features:

- Input voltage range: 2.25V to 5.5V
- Stable with ceramic output capacitor
- 2 LDO outputs
- Output 1: 150mA output current
- Output 2: 300mA output current
- 1 Open-drain driver
- Low dropout voltage of 80mV @ 100mA
- Ultra-low quiescent current of 48µA
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
- Tiny 10-pin 3mm x 3mm MLF® package
Features:

- Input voltage range: 2.25V to 5.5V
- Stable with ceramic output capacitor
- 2 LDO outputs
  - Output 1: 150mA output current
  - Output 2: 300mA output current
- Low dropout voltage of 80mV @ 100mA
- Ultra-low quiescent current of 48µA total (24µA/LDO)
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
- Tiny 10-pin 3mm x 3mm MLF® package
MIC2212
Dual µCap LDO and Power-On Reset

Features:
• Input voltage range: 2.25V to 5.5V
• Stable with ceramic output capacitor
• 2 LDO outputs
  • Output 1: 150mA output current
  • Output 2: 300mA output current
• Power-on reset function with adjustable delay time
• Low dropout voltage of 80mV @ 100mA
• Ultra-low quiescent current of 48µA
• High output accuracy:
  • ±1.0% initial accuracy
  • ±2.0% over temperature
• Thermal shutdown protection
• Current limit protection
• Tiny 10-pin 3mm x 3mm MLF® package
Features:

- 2 LDO outputs
  - Output 1: 150mA output current
  - Output 2: 300mA output current
- 1 Open-drain driver
- Sequencing between outputs 1 and 2
- Input voltage range: 2.25V to 5.5V
- Stable with ceramic output capacitor
- Power-on reset function with adjustable delay time
- Low dropout voltage of 80mV @ 100mA
- Ultra-low quiescent current of 48µA
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Tiny 3mm x 3mm MLF®-10 package
Features:

- Input voltage range: 2.25V to 5.5V
- Stable with ceramic output capacitor
- 2 LDO outputs
  - Output 1: 150mA output current
  - Output 2: 300mA output current
- 1 Open-drain driver
- Power-on reset function with adjustable delay time
- Low dropout voltage of 80mV @ 100mA
- Ultra-low quiescent current of 48µA
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
- Tiny 3mm x 3mm MLF®-10 package
Features:

- Input voltage range: 2.25V to 5.5V
- Stable with ceramic output capacitor
- 2 LDO outputs
  - Output 1: 150mA output current
  - Output 2: 300mA output current
- Feedback pins externally accessible
- Low dropout voltage of 80mV @ 100mA
- Ultra-low quiescent current of 48µA total (24µA/LDO)
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
- Tiny 10-pin 3mm x 3mm MLF® package
MIC5350
Dual 300mA/500mA LDO in 2mm x 2mm Thin MLF®

 Features:
- 2.6V to 5.5V input voltage range
- Ultra-low output noise: $30\mu V_{\text{rms}}$
- $\pm 2\%$ initial output accuracy
- Excellent Load/Line transient response
- Fast start-up time: 30µs
- Tiny 8-pin 2mm x 2mm Thin MLF® leadless package
- Ultra-low dropout voltage: 75mV @ 300mA and 125mV @ 500mA
- µCap stable with 2.2µF ceramic capacitors
- Thermal shutdown protection
- Low quiescent current: 130µA with both outputs at maximum load
- Current limit protection
MIC5374/84
Triple 200mA µCap LDO & 1mA RTC LDO in 2.5mm x 2.5mm Thin QFN

Features:

- 1.7V to 5.5V input supply voltage range
- Output current: 200mA LDO1/2/3, 1mA LDO4
- LDO4: Ultra low 8 µA I BIAS for RTC support
- High output accuracy (±2%)
- Independent enable pins
- 2.5mm x 2.5mm Thin QFN 16-pin package
- Thermal shutdown and current limit protection
- POR with user-defined voltage monitoring
- POR voltage input
- Adjustable delay time
- Manual reset pin
- Low dropout voltage: 170mV at 150mA
- High PSRR: 55dB at 1kHz on each LDO
- Stable with tiny ceramic output capacitors
Features:

- 1.7V to 5.5V input supply voltage range
- Output current: 200mA LDO1/2/3, 1mA LDO4
- LDO4: Ultra low 8 μA I BIAS for RTC support
- High output accuracy (±2%)
- Independent enable pins
- 2.5mm x 2.5mm Thin QFN 16-pin package
- Thermal shutdown and current limit protection
- POR with user-defined voltage monitoring
- POR voltage input
- Adjustable delay time
- Manual reset pin
- Low dropout voltage: 170mV at 150mA
- High PSRR: 55dB at 1kHz on each LDO
- Stable with tiny ceramic output capacitors
MIC2215
Triple High PSRR Low Noise µCap LDO

Features:
- Input voltage range:+2.25V to +5.5V
- 70dB PSRR
- Stable with ceramic output capacitor
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Low dropout voltage of 100mV @ 150mA
- Low quiescent current:110µA per regulator
- Fast turn-on time: 30µs
- Zero off-mode current
- Thermal shutdown protection
- Current-limit protection
- Tiny 16-pin (4mm x 4mm) MLF® package
Features:

- 1.7V to 5.5V input supply voltage range
- Output current: 200mA LDO1/2/3
- High output accuracy (±2%)
- Independent enable pins
- POR with user-defined voltage monitoring
  - POR voltage input
  - Adjustable delay time
  - Manual reset pin
- Low dropout voltage: 170mV at 150mA
- High PSRR: 55dB at 1kHz on each LDO
- Stable with tiny ceramic output capacitors
- 2.5mm x 2.5mm Thin MLF® 16-pin package
- Thermal shutdown and current limit protection
Features:

- Input voltage range: 2.5V to 5.5V
- 150mA guaranteed output current for each output
- Stable with ceramic output capacitors
- Low dropout voltage: 180mV @ 150mA
- Excellent Load/Line Transient Response
- Low quiescent current: 32µA per LDO
- High PSRR: 70dB
- High output accuracy
  - ±2% initial accuracy
- Thermal shutdown and current limit protection
- Available in tiny 2mm x 2mm Thin MLF®
Features:

- Input voltage range: 2.5V to 5.5V
- 150mA guaranteed output current for each output
- Stable with ceramic output capacitors
- Low dropout voltage: 180mV @ 150mA
- Excellent Load/Line Transient Response
- Low quiescent current: 32µA per LDO
- High PSRR: 70dB
- High output accuracy
  - ±2% initial accuracy
- Thermal-shutdown and current-limit protection
- Available in a tiny 6-pin 1.6mm x 1.6mm Thin MLF®
Features:

- 4.5mA typical operating current
- <1µA typical standby current
- Low external parts count
- Optional current limit (35mV typical threshold)
- 1% initial output voltage tolerance in most configurations
- 2% output voltage tolerance over temperature
- Fixed output voltages of 3.3V, 5.0V (MIC5156)
- Fixed output voltages of 3.3V, 5.0V, 12V (MIC5157)
- Programmable (1.3V to 36V) with 2 resistors (MIC5156/8)
- Internal charge pump voltage tripler (MIC5157/8)
- Enable pin to activate or shutdown the regulator
- Internal gate-to-source protective clamp
- All versions available in DIP and SOIC
MIC5159
Programmable Current Limit µCap LDO Regulator Controller

Features:

• Fast transient response
• Input voltage range: $V_{IN}$: 1.65V to 5.5V
• ±1.0% initial output tolerance
• Stable with ceramic output capacitor
• Capable up to 10A
• Logic-controlled shutdown
• Programmable current limit
• Excellent line and load regulation specifications
• Fixed 1.8V or adjustable output voltage down to 1.25V
• Current limit protection
• IttyBitty® SOT-23-6 Package
• Available temperature range: -40°C to +125°C
Features:

- Input voltage range:
  - $V_{\text{IN}} = 0.9\text{V to 5.5V}$
- ±1.0% initial output tolerance
- Dropout down to 25mV @ 10A
- Filters out switching frequency noise on input
- Very high large signal bandwidth >500kHz
- PSRR >40dB at 500kHz
- Adjustable output voltage down to 0.5V
- Stable with any output capacitor
- Excellent line and load regulation specifications
- Logic controlled shutdown
- Current limit protection
- 3mm x 3mm 10-lead MLF® and MSOP-10 packages
- Available -40°C to +125°C junction temperature
Features:

- Input voltage range:
  - $V_{IN} = 1.0V$ to $5.5V$
- $\pm1.0\%$ initial output tolerance
- Dropout down to $25mV$ @ $10A$
- Filters out switching frequency noise on input
- Very high large signal bandwidth >500kHz
- PSRR >40dB at 500kHz
- Adjustable output voltage down to $1.0V$
- Stable with any output capacitor
- Excellent line and load regulation specifications
- Logic controlled shutdown
- Current limit protection
- 10-lead MLF® and MSOP-10 packages
- Available - $-40^\circ C$ to $+125^\circ C$ junction temperature
MIC94305
500mA Switch with Ripple Blocker™ Technology

Features:

• 1.8V to 3.6V input voltage range
• Active noise rejection over a wide frequency band: >60dB from 40kHz to 5MHz
• Rated to 500mA output current
• Current-limit and thermal-limit protected
• Ultra-small 0.84mm x 1.32mm 6-ball CSP
• 1.6mm x 1.6mm, 6-pin Thin DFN
• Logic-controlled enable pin
• -40°C to +125°C junction temperature range
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >60dB from 40kHz to 5MHz
- Rated to 500mA output current
- Current-limit and thermal-limit protected
- Ultra-small 0.84mm x 1.32mm 6-ball CSP
- 1.6mm x 1.6mm, 6-pin Thin DFN
- Logic-controlled enable pin
- -40°C to +125°C junction temperature range
MIC94325/45/55
500mA LDO with Ripple Blocker™ Technology

Features:

• 1.8V to 3.6V input voltage range
• Active noise rejection over a wide frequency band: >50dB from 10Hz to 5MHz at 500mA load
• Rated to 500mA output current
• Fixed and adjustable output voltages
• Optional output auto-discharge when disabled
• Current-limit and thermal-limit protected
• Ultra-small 0.84mm x 1.32mm 6-ball CSP
• 1.6mm x 1.6mm, 6-pin Thin DFN
• -40°C to +125°C junction temperature range
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >60dB from 40kHz to 5MHz
- Rated to 200mA output current
- Current-limit and thermal-limit protected
- Ultra-small 0.88mm x 0.88mm 4-ball CSP
- 1.2mm x 1.6mm, 4-pin Thin MLF®
- Logic-controlled enable pin
- -40°C to +125°C junction temperature range
Features:

- Wide input voltage range: 4.5V to 120V DC
- Very low quiescent current: 31µA typical
- 25mA guaranteed output current
- Adjustable output from 1.215V to 5V
- DC voltage protection down to -24V
- Ability to withstand up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra high PSRR >80dB for RF applications
- High output accuracy
  - ±2% initial accuracy
  - ±3% over temperature ( -40°C to +125°C)
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin ePad SOIC package
- AEC-Q100 qualified
Features:

- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 6µA
- 25mA guaranteed output current
- Adjustable output from 1.27V to 5.5V
- Withstands up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra-high PSRR <90dB
- Ultra-high line rejection (load dump)
- High output accuracy:
  - ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin ePad MSOP package
MAQ5282
120V_{IN} 50mA Ultra-Low I_{Q} High-PSRR Linear Regulator

Features:

- AEC-Q100 qualified
- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 6µA
- 50mA guaranteed output current
- Adjustable output from 1.27V to 5.5V
- Withstands up to +120V DC at the input
- Stable with ceramic output capacitors
- Ultra-high PSRR (80dB at 10kHz)
- Ultra-high line rejection (load dump)
- High output accuracy: ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient 8-pin ePad MSOP package
Features:

- AEC-Q100 qualified
- Wide input voltage range: 6V to 120V DC
- Ultra-low quiescent current: 8µA
- 150mA guaranteed output current
- Adjustable output from 1.23V to 5.5V
- Stable with ceramic capacitors
- Ultra-high PSRR (75dB at 10kHz)
- Ultra-high line rejection (load dump)
- High output accuracy: ±3% initial accuracy
- Thermal shutdown and current limit protection
- Thermally efficient, 8-pin ePad SOIC package
Features:

- 2.7V to 5.5V supply voltage range
- Tiny 12-pin 2.5mm x 2.5mm Thin MLF® package
- Dual Input LDO™ can turn-on prior to DC/DC converter and automatically switch post regulation from the DC/DC converter after it starts

HyperLight Load® DC/DC Converter

- 4MHz frequency in continuous PWM mode
- Tiny 2.2µH inductor, 4.7µF capacitor
- 85% Efficiency at 1mA output current
- >90% peak efficiency

LDO Regulator

- 300mA output current capability
- High Accuracy: ±3% over temperature
- High PSRR: greater than 60dB
- Very low quiescent current: 16µA
Features:
• Low Supply Current: 50μA (typ.)
• Low Dropout Voltage
• Choice of 50mA (TC1014), 100mA (TC1015) and 150mA (TC1185) Output
• High Output Voltage Accuracy
• Standard or Custom Output Voltages
• Power Saving Shutdown Mode
• Reference Bypass Input for Ultra Low-Noise Operation
• Overcurrent and Overtemperature Protection
• Space-Saving 5-Pin SOT-23 Package
• Pin-Compatible Upgrades for Bipolar Regulators
**Features:**
- Low Supply Current: 50μA (typ.)
- Low Dropout Voltage
- Choice of 50mA (TC1014), 100mA (TC1015) and 150mA (TC1185) Output
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Power Saving Shutdown Mode
- Reference Bypass Input for Ultra Low-Noise Operation
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23 Package
- Pin-Compatible Upgrades for Bipolar Regulators
Features:
- Low Ground Current for Longer Battery Life
- Low Dropout Voltage
- Choice of 50mA (TC1054), 100mA (TC1055) and 150mA (TC1186) Output
- High Output Voltage Accuracy
- Power-Saving Shutdown Mode
- ERROR Output Can Be Used as a Low Battery Detector or Microcontroller Reset Generator
- Overcurrent and Overtemperature Protection
- 5-Pin SOT-23 Package
- Pin Compatible Upgrades for Bipolar Regulators
**Features:**

- Low Ground Current for Longer Battery Life
- Low Dropout Voltage
- Choice of 50mA (TC1054), 100mA (TC1055) and 150mA (TC1186) Output
- High Output Voltage Accuracy
- Power-Saving Shutdown Mode
- ERROR Output Can Be Used as a Low Battery Detector or Microcontroller Reset Generator
- Overcurrent and Overtemperature Protection
- 5-Pin SOT-23 Package
- Pin Compatible Upgrades for Bipolar Regulators
TC1070

Features:
• 50μA Ground Current for Longer Battery Life
• Adjustable Output Voltage
• Very Low Dropout Voltage
• Choice of 50mA (TC1070), 100mA (TC1071) and 150mA (TC1187) Output
• Power-Saving Shutdown Mode
• Overcurrent and Overtemperature Protection
• Space-Saving 5-Pin SOT-23 Package
• Pin Compatible with Bipolar Regulators

V_{OUT} = V_{REF} \left( \frac{R_1}{R_2} + 1 \right)

Shutdown Control (from Power Control Logic)
Features:

• 50μA Ground Current for Longer Battery Life
• Adjustable Output Voltage
• Very Low Dropout Voltage
• Choice of 50mA (TC1070), 100mA (TC1071) and 150mA (TC1187) Output
• Power-Saving Shutdown Mode
• Overcurrent and Overtemperature Protection
• Space-Saving 5-Pin SOT-23 Package
• Pin Compatible with Bipolar Regulators
Features:
- 50μA Ground Current for Longer Battery Life
- Very Low Dropout Voltage
- Choice of 50mA (TC1072) and 100mA (TC1073) Output
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Power-Saving Shutdown Mode
- ERROR Output Can Be Used as a Low Battery Detector or Processor Reset Generator
- Bypass Input for Low Noise Operation
- Overcurrent and Overtemperature Protection
- Space-Saving 6-Pin SOT-23 Package
- Pin Compatible Upgrades for Bipolar Regulators
- Standard Output Voltage Options:
  - 1.8V, 2.5V, 2.6V, 2.7V, 2.8V, 2.85V, 3.0V, 3.3V, 3.6V, 4.0V, 5.0V
- Other output voltages are available. Please contact Microchip Technology Inc. for details.
Features:
• Low Supply Current: 55 μA (typical)
• Low Dropout Voltage: 45 mV (typ.) @ 50 mA
• High-Output Voltage Accuracy: ±0.4% (typ.)
• Standard or Custom Output Voltages
• Power-Saving Shutdown Mode
• Reference Bypass Input for Ultra Low-Noise Operation
• Fast Shutdown Response Time: 60 μs (typ.)
• Overcurrent and Overtemperature Protection
• Space-Saving 5-Pin SOT-23A Package
• Pin- Compatible Upgrades for Bipolar Regulators
• Stable with Ceramic Output Capacitors
• Wide Operating Temperature Range: -40°C to +125°C
• Standard Output Voltage Options: 1.8V, 2.5V, 2.6V, 2.7V, 2.8V, 2.85V, 3.0V, 3.3V, 5.0V
Features:

- Low Supply Current: 55μA (typ.)
- Low Dropout Voltage: 45 mV (typ.) @ 50 mA
- High Output Voltage Accuracy: ±0.4% (typ.)
- Standard or Custom Output Voltages
- Power-Saving Shutdown Mode
- ERROR Output Can Be Used as a Low Battery Detector or Processor Reset Generator
- Fast Shutdown Response Time: 60μs (typ.)
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23A Package
- Pin Compatible Upgrades for Bipolar Regulators
- Stable with Ceramic Output Capacitors
Features:
• Extremely Low Ground Current for Longer Battery Life
• Very Low Dropout Voltage
• Choice of 50mA and 100mA Output (TC1223 and TC1224, respectively)
• High Output Voltage Accuracy
• Standard or Custom Output Voltages
• Power Saving Shutdown Mode
• Overcurrent and Overtemperature Protection
• Space-Saving 5-Pin SOT-23A Package
• Pin Compatible Upgrades for Bipolar Regulators
MCP1790/1

Features:
- 48V (43.5V ±10%) load dump protected for 180ms with a 30 second repetition rate (FORD Test Pulse G Loaded)
- Wide steady state supply voltage, 6.0V to 30.0V
- Extended Junction Temperature Range: -40°C to +125°C
- Fixed output voltages: 3.0V, 3.3V, 5.0V
- Low quiescent current: 70μA (typ.)
- Low shutdown quiescent current: 10μA (typ.)
- Output Voltage Tolerances of ±2.5% over the temperature range
- Maximum output current of 70mA @ +125°C Junction Temperature
- Maximum continuous input voltage of 30V
- Internal thermal overload protection, +157°C (typ.) Junction Temperature
- Internal short circuit current limit, 120mA (typ.) for +5V option
- Short Circuit Current Foldback
- Shutdown Input option (MCP1791)
- Power Good Output option (MCP1791)
- High PSRR, -90 dB @100Hz (typ.)
- Stable with 1μF to 1000μF tantalum and electrolytic Capacitors
- Stable with 4.7μF to 1000μF ceramic capacitors
Features:
• 48V (43.5V ±10%) load dump protected for 180ms with a 30 second repetition rate (FORD Test Pulse G Loaded)
• Wide steady state supply voltage, 6.0V to 30.0V
• Extended Junction Temperature Range: -40°C to +125°C
• Fixed output voltages: 3.0V, 3.3V, 5.0V
• Low quiescent current: 70μA (typ.)
• Low shutdown quiescent current: 10μA (typ.)
• Output Voltage Tolerances of ±2.5% over the temperature range
• Maximum output current of 70mA @ +125°C Junction Temperature
• Maximum continuous input voltage of 30V
• Internal thermal overload protection, +157°C (typ.) Junction Temperature
• Internal short circuit current limit, 120mA (typ.) for +5V option
• Short Circuit Current Foldback
• Shutdown Input option (MCP1791)
• Power Good Output option (MCP1791)
• High PSRR, -90 dB @100Hz (typ.)
• Stable with 1μF to 1000μF tantalum and electrolytic Capacitors
• Stable with 4.7μF to 1000μF ceramic capacitors
Features:

- **Space-Saving 5-Pin SC-70 Package**
- **Low Operating Current: 53μA (typ.)**
  - **Shutdown Mode: 0.05μA (typ.)**
- **Very Low Dropout Voltage**
- **Rated 80mA Output Current**
- **Requires only 1μF Ceramic Output Capacitance**
- **High Output Voltage Accuracy:** ±0.5% (typ.)
- **10μs (typ.) Wake-Up Time from SHDN**
- **Overcurrent and Overtemperature Protection**
- **Pin Compatible Upgrades for Bipolar Regulators**
Features:

- Low Supply Current: 50μA (typ.)
- Low Dropout Voltage
- Choice of 50mA (TC1014), 100mA (TC1015) and 150mA (TC1185) Output
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Power Saving Shutdown Mode
- Reference Bypass Input for Ultra Low-Noise Operation
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23 Package
- Pin Compatible Upgrades for Bipolar Regulators
Features:
• Low Ground Current
• Low Dropout Voltage
• Choice of 50mA (TC1054), 100mA (TC1055) and 150mA (TC1186) Output
• High Output Voltage Accuracy
• Power-Saving Shutdown Mode
• ERROR Output Can Be Used as a Low Battery Detector or Microcontroller Reset Generator
• Overcurrent and Overtemperature Protection
• 5-Pin SOT-23 Package
• Pin Compatible Upgrades for Bipolar Regulators
Features:
• Low Supply Current: 55 μA (typical)
• Low Dropout Voltage: 90 mV (typ.) @ 100 mA
• High-Output Voltage Accuracy: ±0.4% (typ.)
• Standard or Custom Output Voltages
• Power-Saving Shutdown Mode
• Reference Bypass Input for Ultra Low-Noise Operation
• Fast Shutdown Response Time: 60μs (typ.)
• Over-current and Over-temperature Protection
• Space-Saving 5-Pin SOT-23A Package
• Pin-Compatible Upgrades for Bipolar Regulators
• Stable with Ceramic Output Capacitors
• Wide Operating Temperature Range: -40°C to +125°C
Features:
- Low Supply Current, 55 μA (typ.)
- Low Dropout Voltage: 90 mV (typ.) @ 100 mA
- High Output Voltage Accuracy: ±0.4% (typ.)
- Standard or Custom Output Voltages
- Power-Saving Shutdown Mode
- ERROR Output Can Be Used as a Low Battery Detector or Processor Reset Generator
- Fast Shutdown Response Time: 60μs (typ.)
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23A Package
- Pin Compatible Upgrades for Bipolar Regulators
- Stable with Ceramic Output Capacitors
Features:
• 50μA Ground Current for Longer Battery Life
• Adjustable Output Voltage
• Very Low Dropout Voltage
• Choice of 50mA (TC1070), 100mA (TC1071) and 150mA (TC1187) Output
• Power-Saving Shutdown Mode
• Over Current and Over Temperature Protection
• Space-Saving 5-Pin SOT-23 Package
• Pin Compatible with Bipolar Regulators
Features:
- 50μA Ground Current for Longer Battery Life
- Adjustable Output Voltage
- Very Low Dropout Voltage
- Choice of 50mA (TC1070), 100mA (TC1071) and 150mA (TC1187) Output
- Power-Saving Shutdown Mode
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23 Package
- Pin Compatible with Bipolar Regulators
Features:

- Low Ground Current for Longer Battery Life
- Low Dropout Voltage
- Choice of 50mA (TC1223), 100mA (TC1224) Output Current
- High Output Voltage Accuracy
- Standard of Custom Output Voltages
- Power Saving Shutdown Mode
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23A Package
- Pin Compatible Upgrades for Bipolar Regulators
**Features:**

- Input Voltage Range: 2.7V to 6.0V
- 120mA Output Current
- Low Supply Current: 50μA, (typ.)
- Low Dropout Voltage: 110mV (typ.) @ 100mA
- Fast Turn-On from Shutdown: 140μs (typ.)
- Low Output Noise
- Overcurrent and Overtemperature Protection
- Low Power Shutdown Mode
- Auto Discharge of Output Capacitor (TC1189)
**Features:**

- 150 mA Output Current
- Low Dropout Voltage, 260mV typ. @ 20mA, VR=3.3V
- 50 μA Typical Quiescent Current
- 0.01 μA Typical Shutdown Current
- Input Operating Voltage Range: 2.0V to 28.0V
- Standard Output Voltage Options
  (1.8V, 2.5V, 3.0V, 3.3V, 5.0V, 10.0V, 12.0V)
- Output Voltage Accuracy: ±2%
- Output voltages from 1.8V to 18.0V in 0.1V increments are available upon request
- Stable with Ceramic output capacitors
- Current Limit Protection With Current Foldback
- Shutdown pin
- High PSRR: 50 dB typical @ 1 kHz
Features:

- Low Supply Current: 50μA (typ.)
- Low Dropout Voltage
- Choice of 50mA (TC1014), 100mA (TC1015) and 150mA (TC1185) Output
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Power-Saving Shutdown Mode
- Reference Bypass Input for Ultra Low-Noise Operation
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23 Package
- Pin-Compatible Upgrades for Bipolar Regulators
Features:

- Low Ground Current for Longer Battery Life
- Low Dropout Voltage
- Choice of 50mA (TC1014), 100mA (TC1015) and 150mA (TC1185) Output
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Power Saving Shutdown Mode
- Error Output Can Be Used as a Low Battery Detector or Microcontroller Reset Generator
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23A Package
- Pin- Compatible Upgrades for Bipolar Regulators
Features:
- 50μA Ground Current for Longer Battery Life
- Adjustable Output Voltage
- Very Low Dropout Voltage
- Choice of 50mA (TC1070), 100mA (TC1071) and 150mA (TC1187) Output
- Power-Saving Shutdown Mode
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23 Package
- Pin Compatible with Bipolar Regulators
**TC2185**

**Features:**
- Low Supply Current: 80μA (max.)
- Low Dropout Voltage: 140mV (typ.) @ 150mA
- High-Output Voltage Accuracy: ±0.4% (typ.)
- Standard or Custom Output Voltages
- Power-Saving Shutdown Mode
- Reference Bypass Input for Ultra Low-Noise Operation
- Fast Shutdown Response Time: 60μs (typ.)
- Over-current and Over-temperature Protection
- Space-Saving 5-Pin SOT-23A Package
- Pin-Compatible Upgrades for Bipolar Regulators
- Stable with Ceramic Output Capacitors
- Wide Operating Temperature Range: -40°C to +125°C
TC2186

Features:
- Low Supply Current: 55μA (typ.)
- Low Dropout Voltage:
  140mV (typ.) @ 150mA
- High Output Voltage Accuracy: ±0.4% (typ.)
- Standard or Custom Output Voltages
- Power-Saving Shutdown Mode
- ERROR Output Can Be Used as a Low Battery Detector or Processor Reset Generator
- Fast Shutdown Response Time: 60μs (typ.)
- Overcurrent and Overtemperature Protection
- Space-Saving 5-Pin SOT-23A Package
- Pin Compatible Upgrades for Bipolar Regulators
- Stable with Ceramic Output Capacitors
Features:

- Space Saving 5-Pin SC-70 and SOT-23 Packages
- Low Operating Current: 53μA (typ.)
  Shutdown Mode: 0.05μA (typ.)
- High Output Voltage Accuracy: ±0.5% (typ.)
- Very Low Dropout Voltage
- Rated 150mA Output Current
- Wake-Up Time from SHDN: 10μs (typ.)
- Overcurrent and Overtemperature Protection
- Pin Compatible Upgrades for Bipolar Regulators
- Requires Only 1μF Ceramic Output Capacitance
TC1017

Features:
• Space Saving 5-Pin SC-70 and SOT-23 Packages
• Low Operating Current: 53µA (typ.)
  Shutdown Mode: 0.05µA (typ.)
• High Output Voltage Accuracy: ±0.5% (typ.)
• Very Low Dropout Voltage
• Rated 150mA Output Current
• Wake-Up Time from SHDN: 10µs (typ.)
• Overcurrent and Overtemperature Protection
• Pin Compatible Upgrades for Bipolar Regulators
• Requires Only 1µF Ceramic Output Capacitance
Features:

- 300mA Output Current Capability
- Input Operating Voltage Range: 2.1V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V (MCP1824 only)
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 200mV (typ.) @ 300mA
- Typical Output Voltage Tolerance: 0.4%
- Stable with 1.0μF Ceramic Output Capacitor
- Fast Response to Load Transients
- Low Supply Current: 120μA (typ.)
- Low Shutdown Supply Current: 0.1μA (typ.) (MCP1824 only)
- Fixed Delay on Power Good Output (MCP1824 only)
- Short Circuit Current Limiting and Overtemperature Protection
- 5-Lead Plastic SOT-223, SOT-23 Package Options (MCP1824)
- 3-Lead Plastic SOT-223 Package Option (MCP1824S)
Features:

- 300mA Output Current Capability
- Input Operating Voltage Range: 2.1V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V
  (MCP1824 only)
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 200mV (typ.) @ 300mA
- Typical Output Voltage Tolerance: 0.4%
- Stable with 1.0μF Ceramic Output Capacitor
- Fast Response to Load Transients
- Low Supply Current: 120μA (typ.)
- Low Shutdown Supply Current: 0.1μA (typ.)
  (MCP1824 only)
- Fixed Delay on Power Good Output
  (MCP1824 only)
- Short Circuit Current Limiting and Overtemperature Protection
- 5-Lead Plastic SOT-223, SOT-23 Package Options (MCP1824)
- 3-Lead Plastic SOT-223 Package Option
  (MCP1824S)
Features:

- 500mA Output Current Capability
- Input Operating Voltage Range: 2.1V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V (MCP1825 only)
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 210mV (typ.) at 500mA
- Typical Output Voltage Tolerance: 0.5%
- Stable with 1.0μF Ceramic Output Capacitor
- Fast response to Load Transients
- Low Supply Current: 120μA (typ.)
- Low Shutdown Supply Current: 0.1μA (typ.) (MCP1825 only)
- Fixed Delay on Power Good Output (MCP1825 only)
- Short Circuit Current Limiting and Overtemperature Protection
- TO-263-5 (DDPAK-5), TO-220-5, SOT-223-5 Package Options (MCP1825)
- TO-263-3 (DDPAK-3), TO-220-3, SOT-223-3 Package Options (MCP1825S)
Features:

- 1000mA Output Current Capability
- Input Operating Voltage Range: 2.3V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V **(MCP1826 only)**
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 250mV (typ.) @ 1000mA
- Typical Output Voltage Tolerance: 0.5%
- Stable with 1.0μF Ceramic Output Capacitor
- Fast response to Load Transients
- Low Supply Current: 120μA (typ.)
- Low Shutdown Supply Current: 0.1μA (typ.) **(MCP1826 only)**
- Fixed Delay on Power Good Output **(MCP1826 only)**
- Short Circuit Current Limiting and Overtemperature Protection
- TO-263-5 (DDPAK-5), TO-220-5, SOT-223-5 Package Options **(MCP1826).**
- TO-263-3 (DDPAK-3), TO-220-3, SOT-223-3 Package Options **(MCP1826S).**
Features:
- 1000mA Output Current Capability
- Input Operating Voltage Range: 2.3V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V (MCP1826 only)
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 250mV (typ.) @ 1000mA
- Typical Output Voltage Tolerance: 0.5%
- Stable with 1.0μF Ceramic Output Capacitor
- Fast response to Load Transients
- Low Supply Current: 120μA (typ.)
- Low Shutdown Supply Current: 0.1μA (typ.) (MCP1826 only)
- Fixed Delay on Power Good Output (MCP1826 only)
- Short Circuit Current Limiting and Overtemperature Protection
- TO-263-5 (DDPAK-5), TO-220-5, SOT-223-5 Package Options (MCP1826).
- TO-263-3 (DDPAK-3), TO-220-3, SOT-223-3 Package Options (MCP1826S).
Features:
• 1.6μA (typ.) Quiescent Current
• Input Operating Voltage Range: 2.3V to 6.0V
• Output Voltage Range: 1.2V to 5.0V
• 250mA Output Current for Output Voltages ≥ 2.5V
• 200mA Output Current for Output Voltages < 2.5V
• Low Dropout voltage: 178mV (typ.) @ 250mA for V_{OUT} = 2.8V
• 0.4% (typ.) Output Voltage Tolerance
• Stable with 1.0μF Ceramic Output Capacitor
• Short Circuit Protection
• Overtemperature Protection
Features:

- 2.0μA Quiescent Current (typ.)
- Input Operating Voltage Range: 2.7V to 13.2V
- 250mA Output Current for Output Voltages ≥ 2.5V
- 200mA Output Current for Output Voltages < 2.5V
- Output voltage range 1.2V to 5.5V in 0.1V increments (50mV increments available upon request)
- Stable with 1.0μF to 22μF Output Capacitor
- Short-Circuit Protection
- Overtemperature Protection
- Package Options: 3-Pin SOT-23A, 3-Pin SOT-89, TO-92-3
MCP1703

Features:
• 2.0μA Quiescent Current (typ.)
• Input Operating Voltage Range: 2.7V to 16V
• 250mA Output Current for Output Voltages ≥ 2.5V
• 200mA Output Current for Output Voltages < 2.5V
• 0.4% (typ.) Output Voltage Tolerance
• Output voltage range 1.2V to 5.5V in 0.1V increments (50mV increments available upon request)
• Stable with 1.0μF to 22μF Output Capacitor
• Short-Circuit Protection
• Overtemperature Protection
• Package Options: 3-Pin SOT-23A, 3-Pin SOT-89, TO-92-3, 2x3 DFN
MCP1703A

Features:
• 2.0μA Quiescent Current (typ.)
• Input Operating Voltage Range: 2.7V to 16V
• 250mA Output Current for Output Voltages ≥ 2.5V
• 200mA Output Current for Output Voltages < 2.5V
• 0.4% (typ.) Output Voltage Tolerance
• Output voltage range 1.2V to 5.5V in 0.1V increments (50mV increments available upon request)
• Stable with 1.0μF to 22μF Output Capacitor
• Short-Circuit Protection
• Overtemperature Protection
• Package Options: 3-Pin SOT-23A, 3-Pin SOT-89, TO-92-3, 2x3 DFN
Features:
- 2.0μA Quiescent Current (typ.)
- Input Operating Voltage Range: 2.7V to 16V
- 250mA Output Current for Output Voltages ≥ 2.5V
- 200mA Output Current for Output Voltages < 2.5V
- 0.4% (typ.) Output Voltage Tolerance
- Output voltage range 1.2V to 5.5V in 0.1V increments (50mV increments available upon request)
- Stable with 1.0μF to 22μF Output Capacitor
- Short-Circuit Protection
- Overtemperature Protection
- Package Options: 3-Pin SOT-23A, 3-Pin SOT-89, TO-92-3, 2x3 DFN
Features:

• Ultra-Low Quiescent Current: 600 nA (typ)
• Shutdown Supply Current: 10 nA (typ)
• Input Operating Voltage Range: 1.4V to 6.0V
• 150 mA Output Current Capability
• Output Capacitor:
  • Low Equivalent Series Resistance (ESR)
  • or Capacitorless Compatible
• Low Dropout Voltage:
  450 mV Maximum at 200 mA
• Stable with 1.0 µF Ceramic Output Capacitor
• Protection Circuits:
  • Current Limiter, Short Circuit, Foldback
• Space Saving 4L 1x1 DFN and 5L SOT-23
Features:

- High PSRR: >70 dB @ 1 kHz typical
- 56.0 μA Typical Quiescent Current
- Input Operating Voltage Range: 3.6V to 16.0V
- 150 mA Output Current
- Low Dropout Voltage, 300 mV Typical @ 150 mA
- 0.4% Typical Output Voltage Tolerance
- Standard Output Voltage Options (1.8V, 2.5V, 2.8V, 3.0V, 3.3V, 4.0V, 5.0V)
- Output Voltage Range 1.8V to 5.5V in 0.1V increments
- Output Voltage Tolerances of ±2.0% Over Temperature
- Stable with Minimum 1.0 μF Output Capacitance
- Power Good Output
- Shutdown Input
- True Current Foldback Protection
- Short-Circuit Protection
- Overtemperature Protection

Package Options:

3-pin SOT-23A, SOT-89, SOT-223, 2x3 DFN-8 (MCP1754S)
5-pin SOT-23, SOT-223, and 2x3 DFN-8
MCP1754/S

Features:
• High PSRR: >70 dB @ 1 kHz typical
• 56.0 μA Typical Quiescent Current
• Input Operating Voltage Range: 3.6V to 16.0V
• 150 mA Output Current
• Low Dropout Voltage, 300 mV Typical @ 150 mA
• 0.4% Typical Output Voltage Tolerance
• Standard Output Voltage Options (1.8V, 2.5V, 2.8V, 3.0V, 3.3V, 4.0V, 5.0V)
• Output Voltage Range 1.8V to 5.5V in 0.1V increments
• Output Voltage Tolerances of ±2.0% Over Temperature
• Stable with Minimum 1.0 μF Output Capacitance
• Power Good Output
• Shutdown Input
• True Current Foldback Protection
• Short-Circuit Protection
• Overtemperature Protection

Package Options:
3-pin SOT-23A, SOT-89, SOT-223, 2x3 DFN-8 (MCP1754S)
5-pin SOT-23, SOT-223, and 2x3 DFN-8
Features:

- High PSRR: >70 dB @ 1 kHz typical
- 68.0 μA Typical Quiescent Current
- Input Operating Voltage Range: 3.6V to 16.0V
- 300 mA Output Current
- Low Dropout Voltage, 300 mV Typical @ 300 mA
- 0.85% Typical Output Voltage Tolerance
- Standard Output Voltage Options (1.8V, 2.5V, 2.8V, 3.0V, 3.3V, 4.0V, 5.0V)
- Output Voltage Range 1.8V to 5.5V in 0.1V increments
- Output Voltage Tolerances of ±2.0% Over Temperature
- Stable with Minimum 1.0 μF Output Capacitance
- Power Good Output
- Shutdown Input
- True Current Foldback Protection
- Short-Circuit Protection
- Overtemperature Protection

Package Options:

- 3-pin SOT-223, 8-lead 2x3 (MCP1755S)
- 5-pin SOT-23, SOT-223, and 8-lead 2x3 DFN (MCP1755)
Features:
• Extremely Low Supply Current: 50µA (typ.)
• Very Low Dropout Voltage
• 300mA Output Current
• High Output Voltage Accuracy
• Standard or Custom Output Voltages
• Power Saving Shutdown Mode
• Bypass Input for Ultra-Quiet Operation
• Over-Current and Over-Temperature Protection
• Space Saving MSOP Package Option
**Features:**

- Extremely Low Supply Current: 50µA (typ.)
- Very Low Dropout Voltage
- 300mA Output Current
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Overcurrent and Overtemperature Protection
Features:
- Extremely Low Supply Current
- Very Low Dropout Voltage
- 300mA Output Current
- ERROR Output can be used as a Low Battery Detector or Processor Reset Generator
- Power Saving Shutdown Mode
- Bypass Input for Ultra-Quiet Operation
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Overcurrent and Overtemperature Protection
- Space Saving MSOP Package Option
Features:
• Extremely Low Supply Current: 50μA (typ.)
• Very Low Dropout Voltage
• 300mA Output Current
• Adjustable Output Voltage
• Power Saving Shutdown Mode
• Bypass Input for Ultra-Quiet Operation
• Overcurrent and Overtemperature Protection
• Space Saving MSOP Package Option
Features:
• Very Low Ground Current for Longer Battery Life
• Very Low Dropout Voltage
• 300mA Output Circuit
• High Output Voltage Accuracy
• Standard or Custom Output Voltages
• Power Saving Shutdown Mode
• Bypass Input for Ultra-Quiet Operation
• Over Current and Over Temperature Protection
• Space-Saving MSOP Package
**Features:**

- 500mA Output Current Capability
- Input Operating Voltage Range: 2.3V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 210mV (typ.) @ 500mA
- Output Voltage Tolerance: 0.5% (typ.)
- Stable with 1.0μF Ceramic Output Capacitor
- Low Supply Current: 120μA (typ.)
- Adjustable Delay on Power Good Output
- Short Circuit Current Limiting and Overtemperature Protection
- Small Packaging: 2x3 DFN-8 and SOIC-8 Packages
MCP1725

Features:

- 500mA Output Current Capability
- Input Operating Voltage Range: 2.3V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 210mV (typ.) @ 500mA
- Output Voltage Tolerance: 0.5% (typ.)
- Stable with 1.0μF Ceramic Output Capacitor
- Low Supply Current: 120μA (typ.)
- Adjustable Delay on Power Good Output
- Short Circuit Current Limiting and Overtemperature Protection
- Small Packaging: 2x3 DFN-8 and SOIC-8 Packages
Features:

- Very Low Dropout Voltage
- 500mA Output Current
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Overcurrent and Overtemperature Protection

![Diagram of TC1262]
Features:

- Very Low Dropout Voltage
- 500mA Output Current
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Overcurrent and Overtemperature Protection
- SHDN Input for Active Power Management
- ERROR Output can be used as a Low Battery Detector (SOIC only)
Features:
• Very Low Dropout Voltage
• 800mA Output Current
• High Output Voltage Accuracy
• Standard or Custom Output Voltages
• Overcurrent and
  Overtemperature Protection
Features:

- Very Low Dropout Voltage
- 800mA Output Current
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Overcurrent and Overtemperature Protection
- SHDN Input for Active Power Management
- ERROR Output to Detect Low Battery (SOIC only)
Features:
- Very Low Dropout Voltage
- 800mA Output Current
- High Output Voltage Accuracy
- Standard or Custom Output Voltages
- Overcurrent and Overtemperature Protection
- Space Saving SOT-223 Package
- Fixed Output Voltages: 1.8V, 2.5V, 3.0V, 3.3V
Features:
- 1A Output Current Capability
- Input Operating Voltage Range: 2.3V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Low Dropout Voltage: 220mV (typ.) @ 1A
- Output Voltage Tolerance: 0.4% (typ.)
- Stable with 1.0μF Ceramic Output Capacitor
- Fast response to Load Transients
- Low Supply Current: 140μA (typ.)
- Low Shutdown Supply Current: 0.1μA (typ.)
- Adjustable Delay on Power Good Output
- Short Circuit Current Limiting and Overtemperature Protection
- 3x3 DFN-8 and SOIC-8 Package Options
Features:
• Up to 1.5A output load current
• Low Dropout Voltage: 330mV (typ.) @ 1.5A
• Output voltage from 0.8V to 5.0V, both fixed and adjustable
• Stable with 1.0µF ceramic output capacitor
• Output Voltage Tolerance: 0.5% (typ.)
• Power good output with adjustable delay
• Low supply current: 140µA (typ.)
• Low shutdown current: 0.1µA (typ.)
• Short Circuit Current Limiting and Overtemperature Protection
• DFN-8 3x3 and SOIC-8 Pb-free packages
Features:

- Up to 1.5A output load current
- Low Dropout Voltage: 330mV (typ.) @ 1.5A
- Output voltage from 0.8V to 5.0V, both fixed and adjustable
- Stable with 1.0µF ceramic output capacitor
- Output Voltage Tolerance: 0.5% (typ.)
- Power good output with adjustable delay
- Low supply current: 140µA (typ.)
- Low shutdown current: 0.1µA (typ.)
- Short Circuit Current Limiting and Overtemperature Protection
- DFN-8 3x3 and SOIC-8 Pb-free packages
MCP1827/S

Features:
- 1.5A Output Current Capability
- Input Operating Voltage Range: 2.3V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V (MCP1827 only)
- Standard Fixed Output Voltages:
  0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 330mV (typ.) @ 1.5A
- Output Voltage Tolerance: 0.5% (typ.)
- Stable with 1.0μF Ceramic Output Capacitor
- Fast response to Load Transients
- Low Supply Current: 120μA (typ.)
- Low Shutdown Supply Current: 0.1μA (typ.) (MCP1827 only)
- Fixed Delay on Power Good Output (MCP1827 only)
- Short Circuit Current Limiting and Overtemperature Protection
- 5-Lead Plastic DDPAK, 5-Lead TO-220 Package Options (MCP1827)
- 3-Lead Plastic DDPAK, 3-Lead TO-220 Package Options (MCP1827S)
Features:

- 1.5A Output Current Capability
- Input Operating Voltage Range: 2.3V to 6.0V
- Adjustable Output Voltage Range: 0.8V to 5.0V (MCP1827 only)
- Standard Fixed Output Voltages: 0.8V, 1.2V, 1.8V, 2.5V, 3.0V, 3.3V, 5.0V
- Other Fixed Output Voltage Options Available Upon Request
- Low Dropout Voltage: 330mV (typ.) @ 1.5A
- Output Voltage Tolerance: 0.5% (typ.)
- Stable with 1.0μF Ceramic Output Capacitor
- Fast response to Load Transients
- Low Supply Current: 120μA (typ.)
- Low Shutdown Supply Current: 0.1μA (typ.) (MCP1827 only)
- Fixed Delay on Power Good Output (MCP1827 only)
- Short Circuit Current Limiting and Overtemperature Protection
- 5-Lead Plastic DDPAK, 5-Lead TO-220 Package Options (MCP1827)
- 3-Lead Plastic DDPAK, 3-Lead TO-220 Package Options (MCP1827S)
Features:
- Low Dropout Voltage
  120mV (typ.) @ 50mA
  380mV (typ.) @ 100mA for -5.0V Out
- High Output Voltage Accuracy: 2% (max.)
- Low Supply Current: 3.5µA (typ.)
- Small Package: 3-Pin SOT-23A
Features:
- LDO with Integrated Microprocessor Reset Monitor Functionality
- Low Supply Current: 80µA (typ.)
- Stable with Any Type of Capacitor
- Very Low Dropout Voltage
- 10µs (typ.) Wake Up Time from SHDN
- Standard or Custom Output and Detected Voltages
- Power-Saving Shutdown Mode
- Bypass Input for Ultra-Quiet Operation
- Separate Input and Detected Voltage
- 140ms Guaranteed Minimum RESET Output Duration
Features:
• Four Independent 150mA LDOs
• Low Supply Current 220μA (typ.)
• SelectMode™: Selectable Output Voltages for High Design Flexibility
• Low Dropout Voltage: 100mV (typ.) with 150mA load
• 10μs (typ.) Wake Up Time from SHDN
• High Output Voltage Accuracy: 0.5% (typ.)
• Power-Saving Shutdown Mode
• RESET Output used as a Low Battery Detector or Processor Reset Generator
• Overcurrent and Overtemperature Protection
• Small 16-Pin QSOP Package
Features:

- Dual-Output Regulator (500mA Buck Regulator and 300mA LDO)
- Power-Good Output with 300ms Delay
- Quiescent Current: 65μA (typ.)
- Independent Shutdown for Buck and LDO Outputs (TC1303)
- Synchronous Buck Regulator:
  - Over 90% (typ.) Efficiency
  - 2.0MHz Fixed-Frequency PWM
  - Automatic PWM to PFM Mode Transition
  - Adjustable and Standard Output Voltages
- Low-Dropout Regulator:
  - Dropout Voltage: 137mV @ 200mA (typ.)
  - Standard Fixed Output Voltages
- Power-Good Function:
  - Monitors Buck Output Function (TC1303A)
  - Monitors LDO Output Function (TC1303B)
  - Monitors Both Buck and LDO Output Function (TC1303C and TC1304)
- Sequenced Startup and Shutdown (TC1304)
- Small 10-Pin 3x3 DFN or MSOP Package
TC1303/4 (cont.)

TC1303A
Fixed-Output Application
10-Lead MSOP

TC1303B
Adjustable-Output Application
10-Lead DFN

Note: Connect DFN package exposed pad to AGND.

TC1304
Fixed-Output Application
10-Lead MSOP

Note: PG open-drain for TC1304
Features:

- Dual-Output Regulator (500mA Buck Regulator and 300mA LDO)
- Quiescent Current: 57μA (typ.)
- Independent Shutdown for Buck and LDO Outputs
- Synchronous Buck Regulator:
  - Over 90% (typ.) Efficiency
  - 2.0MHz Fixed-Frequency PWM
  - Automatic PWM to PFM Mode Transition
  - Adjustable and Standard Output Voltages
- Low-Dropout Regulator:
  - Dropout Voltage: 137mV @ 200mA (typ.)
  - Standard Fixed Output Voltages
- Undervoltage Lockout (UVLO)
- Output Short Circuit Protection
- Overtemperature Protection
- Small 10-Pin 3x3 DFN or MSOP Package
Features:

- Dual Output LDO with Microcontroller Reset Monitor Functionality:
  - $V_{OUT1} = 1.5$ to $3.3V @ 300mA$
  - $V_{OUT2} = 1.5V$ to $3.3V @ 150mA$
  - $V_{RESET} = 2.20V$ to $3.20V$
- Output Voltage and RESET Threshold Voltage Options Available (See Table 8-1)
- Low Dropout Voltage:
  - $V_{OUT1}$: $104mV @ 300mA$ (typ.)
  - $V_{OUT2}$: $150mV @ 150mA$ (typ.)
- Low Supply Current: $116\mu A$ (typ.)
- Reference Bypass Input for Low Noise Operation
- Both Output Voltages Stable with a Minimum 1μF Ceramic Output Capacitor
- Separate Input for RESET Detect Voltage (TC1301A)
- Separate $V_{OUT1}$ and $V_{OUT2}$ SHDN Pins (TC1301B)
- Power Saving Shutdown Mode
- Small 8-Pin DFN and MSOP Packages
Features:

- Dual Output LDO:
  \[ V_{OUT1} = 1.5 \text{ to } 3.3V \@ 300mA \]
  \[ V_{OUT2} = 1.5V \text{ to } 3.3V \@ 150mA \]
  \[ V_{RESET} = 2.20V \text{ to } 3.20V \]
- Output Voltage Options (See Table 8-1)
- Low Dropout Voltage:
  - \[ V_{OUT1} \]: 104mV @ 300mA (typ.)
  - \[ V_{OUT2} \]: 150mV @ 150mA (typ.)
- Low Supply Current: 116μA (typ.)
- Reference Bypass Input for Low Noise Operation
- Both Output Voltages Stable with a Minimum 1μF Ceramic Output Capacitor
- Separate \[ V_{OUT1} \] and \[ V_{OUT2} \] SHDN Pins (TC1302B)
- Power Saving Shutdown Mode
- Overtemperature and Overcurrent Protection
- Small 8-Pin DFN and MSOP Packages
Features:

- Input voltage range: 2.4V to 5.5V
- Ultra-low $I_Q$: only 20µA operating current
- Stable with ceramic output capacitor
- Low dropout voltage of 120mV at 300mA
- High output accuracy:
  - ±1.0% initial accuracy
  - ±2.0% over temperature
- Thermal shutdown protection
- Current limit protection
Features:

- Input voltage range: 2.5V to 5.5V
- Fixed output voltages from 1.0V to 3.3V
- 300mA guaranteed output current
- High output accuracy (±2%)
- Low quiescent current: 38μA
- Stable with 1μF ceramic output capacitors
- Low dropout voltage: 160mV @ 300mA
- Output discharge circuit: MIC5502, MIC5504
- Internal enable pull-down: MIC5503, MIC5504
- Thermal-shutdown and current-limit protection
- 4-lead 1.0mm x 1.0mm Thin DFN package
- MIC5504 5-pin SOT23 package
Features:

- 300mA output current
- Low $I_Q$: only 24µA operating current
- Low dropout voltage: 180mV at 300mA
- Active discharge when enable pin is low
- Input voltage range: 2.3V to 5.5V
- Fixed output voltages
- Stable with 1µF ceramic capacitors
- Thermal shutdown and current limit protection
- Tiny 4-pin 1.2mm x 1.6mm Thin MLF® package
MIC5303
300mA Ultra-Small ULDO

Features:

- Ultra-small 1.2mm x 1.6mm Thin MLF® package
- Low dropout voltage: 100mV at 300mA
- Output noise: 120µV<sub>rms</sub>
- Input voltage range: 2.3V to 5.5V
- 300mA guaranteed output current
- Stable with ceramic output capacitors
- Low quiescent current: 85µA total
- 35µs turn-on time
- High output accuracy:
  - ±2% initial accuracy
  - ±3% over temperature
- Thermal shutdown and current limit protection
Features:

- 300mA output current
- Low $I_Q$: only 24µA operating current
- Low dropout voltage: 180mV at 300mA
- Active discharge when enable pin is low
- Input voltage range: 2.3V to 5.5V
- Fixed output voltages
- Stable with 1µF ceramic capacitors
- Thermal shutdown and current limit protection
- Tiny 4-pin 1.2mm x 1.6mm Thin MLF® package
Features:

• Input voltage range: 1.6V to 5.5V
• High PSRR: up to 90dB at 1kHz
• Guaranteed 150mA over temperature
• Ultra-low dropout voltage: 45mV at 150mA
• Output voltage range: 0.8V to 2.0V
• Very low ground current: 23µA under full load
• Bias supply voltage range: 2.5V to 5.5V
• Stable with 1µF ceramic output capacitor
• Thermal shutdown and current limit protection
• 1.6x1.6mm DFN (MLF) and SOT23-6 package
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >60dB from 40kHz to 5MHz
- Rated to 500mA output current
- Current-limit and thermal-limit protected
- Ultra-small 0.84mm x 1.32mm 6-ball CSP
- 1.6mm x 1.6mm, 6-pin Thin DFN
- Logic-controlled enable pin
- -40°C to +125°C junction temperature range
Features:
- Input voltage range: 1.0V to 3.6V
- Stable with 1µF ceramic output capacitor
- ±1.5% initial output voltage accuracy
- Bias supply voltage range: 2.3V to 5.5V
- Adjustable output voltage range: 0.4V to 2.0V
- Logic-level enable input
- 400mA maximum output current per LDO
- Very fast transient response
- UVLO on both supply packages
- Thermally enhanced 2mm x 2mm MLF® and Thin MLF® packages
- Junction temperature range of -40°C to +125°C
- Low dropout voltage ULDO™: 44mV at 500mA
Features:

- Input voltage range: 1.0V to 3.6V
- Stable with 1µF ceramic output capacitor
- Low dropout voltage: 49mV at 500mA
- ±2% initial output voltage accuracy over temperature
- Bias supply voltage range: 2.3V to 5.5V
- Adjustable output voltage range down to 0.4V
- Logic-level enable input
- UVLO on both supply voltages
- High bandwidth - very fast transient response
- Low shutdown current: 0.1µA typical
- Thermally enhanced 2mm x 2mm Thin DFN package
- Junction temperature range of -40°C to +125°C
Features:

- Input voltage range: 1.0V to 3.6V
- Stable with 1µF ceramic output capacitor
- ±1.5% initial output voltage accuracy
- Bias supply voltage range: 2.3V to 5.5V
- Adjustable output voltage range: 0.4V to 2.0V
- Logic-level enable input
- 400mA maximum output current per LDO
- Very fast transient response
- UVLO on both supply packages
- Thermally enhanced 2mm x 2mm MLF® and Thin MLF® packages
- Junction temperature range of -40ºC to +125ºC
- Low dropout voltage ULDO™: 44mV at 500mA
Features:

- Input voltage range: 1.0V to 3.6V
- Stable with 1µF ceramic output capacitor
- ±1.5% initial output voltage accuracy
- Bias supply voltage range: 2.3V to 5.5V
- Adjustable output voltage range: 0.4V to 2.0V
- Logic-level enable input
- 400mA maximum output current per LDO
- Very fast transient response
- UVLO on both supply packages
- Thermally enhanced 2mm x 2mm MLF® and Thin MLF® packages
- Junction temperature range of -40°C to +125°C
- Low dropout voltage ULDO™: 44mV at 500mA
Features:

- 1.8V to 3.6V input voltage range
- Active noise rejection over a wide frequency band: >60dB from 40kHz to 5MHz
- Rated to 500mA output current
- Current-limit and thermal-limit protected
- Ultra-small 0.84mm x 1.32mm 6-ball CSP
- 1.6mm x 1.6mm, 6-pin Thin DFN
- Logic-controlled enable pin
- -40ºC to +125ºC junction temperature range
Features:

• Wide input voltage range: 1.7V to 5.5V
• Very fast transient response
• Bias supply voltage range: 2.5V to 5.5V
• Ultra-low ground current: 35 µA typical
• 400mA maximum output current per LDO
• Thermal shutdown and current limit protection
• Tiny 6-pin 2mm x 2mm Thin MLF® package
• Ultra-low dropout voltage ULDO™: 110mV at 400mA
• Stable with 1µF ceramic output capacitor
• ±2% voltage accuracy over temperature
• Adjustable output voltage range: 0.8V to 2.0V
Features:

- Input voltage range: 2.5V to 5.5V
- Fixed output voltages down to 1.0V
- 500mA guaranteed output current
- High output initial accuracy (±1%)
- High PSRR: 80dB
- Low quiescent current: 38µA
- Stable with 2.2µF ceramic output capacitors
- Low dropout voltage: 260mV @ 500mA
- Autodischarge and internal enable pulldown
- Thermal-shutdown and current-limit protection
- 4-pin 1mm x 1mm Thin DFN package
Features:

- Input voltage range: 2.5V to 5.5V
- Fixed output voltages down to 1.0V
- ±2% Room temperature accuracy
- Low quiescent current: 38µA
- Stable with 2.2µF ceramic output capacitors
- Low dropout voltage: 260mV @ 500mA
- Autodischarge and internal enable pulldown
- Thermal-shutdown and current-limit protection
- 6-pin 1.2mm x 1.2mm extra thin DFN package
- 6-pin 1.2mm x 1.2mm thin DFN package
Features:

- Operating voltage range:
  - Input Supply: 1.0V to 3.6V
  - Bias Supply: 2.3V to 5.5V
- 0.8V to 2.0V output voltage range
- PSRR >50dB at 100kHz
- Stable with a 1μF ceramic output capacitor
- Low dropout voltage of 80mV at 1A
- High output voltage accuracy:
  - ±1.5% initial accuracy
  - ±2% over temperature
- UVLO on both supply voltages for easy turn-on
- ePad MSOP-8 -- small form factor power package
- Thermally enhanced 2mm x 2mm MLF® -- smallest solution
Features:

- Input voltage range:
  - $V_{IN} = 1.0V$ to $3.8V$
  - $V_{BIAS} = 3.0V$ to $5.5V$
- Stable with 1µF ceramic capacitor
- Maximum dropout voltage of 250mV over temperature
- Adjustable output voltage down to 0.5V
- Ultra fast transient response
- Excellent line and load regulation specifications
- Logic controlled shutdown option
- Thermal shutdown and current limit protection
- Junction temperature range: $-40^\circ C$ to $+125^\circ C$
- 8-pin EPAD SOIC
Features:

- Operating voltage range:
  - Input Supply: 1.0V to 3.6V
  - Bias Supply: 2.3V to 5.5V
- 0.8V to 2.0V output voltage range
- PSRR >50dB at 100kHz
- Stable with a 1µF ceramic output capacitor
- Low dropout voltage of 80mV at 1A
- High output voltage accuracy:
  - ±1.5% initial accuracy
  - ±2% over temperature
- UVLO on both supply voltages for easy turn-on
- ePad MSOP-8 -- small form factor power package
- Thermally enhanced 2mm x 2mm MLF® -- smallest solution
Features:

- Input voltage range:
  - $V_{IN} = 1.0V \text{ to } 3.8V$
  - $V_{BIAS} = 3.0V \text{ to } 5.5V$
- Stable with 1µF ceramic capacitor
- ±1% initial tolerance
- Maximum dropout voltage of 500mV over temperature
- Adjustable output voltage down to 0.5V
- Ultra-fast transient response
- Logic controlled shutdown option
- Thermal shutdown and current limit protection
- -40°C to +125°C junction temperature range
- TO-263 and 8-pin ePad SOIC
- Pin compatible upgrade to MIC49300
Features:

- Input voltage range:
  - \( V_{\text{IN}} = 1.0\text{V} \) to 3.8V
  - \( V_{\text{BIAS}} = 3.0\text{V} \) to 5.5V

- Stable with 1\( \mu \text{F} \) ceramic capacitor

- Maximum dropout voltage of 250mV over temperature

- Adjustable output voltage down to 0.5V

- Ultra fast transient response

- Excellent line and load regulation specifications

- Logic controlled shutdown option

- Thermal shutdown and current limit protection

- Junction temperature range: -40\(^\circ\text{C}\) to +125\(^\circ\text{C}\)

- 8-pin EPAD SOIC
MIC29750/1/2
High-Current LDOs

Features:
- High current capability
  - MIC29150/29151/29152/29153: 1.5A
  - MIC29300/29301/29302/29303: 3A
  - MIC29500/29501/29502/29503: 5A
  - MIC29750/29751/29752: 7.5A
- Low dropout voltage
- Low ground current
- Accurate 1% guaranteed tolerance
- Reverse-battery and load dump protection
- Zero-current shutdown mode (5-pin versions)
- Error flag signals output out-of-regulation (5-pin versions)
- Also characterized for smaller loads with industry-leading performance specifications
- Fixed voltage and adjustable versions
Features:

- High current capability
  - MIC29150/29151/29152/29153: 1.5A
  - MIC29300/29301/29302/29303: 3A
  - MIC29500/29501/29502/29503: 5A
  - MIC29750/29751/29752: 7.5A
- Low dropout voltage
- Low ground current
- Accurate 1% guaranteed tolerance
- Reverse-battery and load dump protection
- Zero-current shutdown mode (5-pin versions)
- Error flag signals output out-of-regulation (5-pin versions)
- Also characterized for smaller loads with industry-leading performance specifications
- Fixed voltage and adjustable versions
What is the MAX input voltage range?

- Up to 5.5Vin
- 6Vin to 16Vin
- 18Vin to 36Vin
- 38Vin to 120Vin

This is not the range of input voltages, only the Max VIN!
What is the MAX current output range?

- 200mA to 300mA
- 400mA to 500mA
LDO Selector (Automotive)

Choices Made
- Automotive
- Single Output
- 5.5Vin Max
- 200-300mA Output.

MAQ5300
5.5Vin Max, 300mA,
100mV dropout,
85µA Low IQ
LDO Selector (Automotive)

Choices Made
- Automotive
- Single Output
- 5.5Vin Max
- 400mA-500mA Output

MIC47050
3.6Vin Max, 500mA,
44mV Ultra Low dropout,
Adjustable Output Voltage
What is the MAX current output range?

- ≤70mA
- 100mA to 150mA
- 200mA to 300mA
- 400mA to 500mA
- 1A to 1.5A
LDO Selector (16Vin Max 70mA)

Choices Made
• Single Output
• 6.0 - 16Vin Max
• ≤70mA Output

TC1014
6Vin Max, 85mV DO,
50mA Output, SOT-23

TC1054
6Vin Max, 85mV DO
50mA Output, ±0.5%
Accuracy

TC1070
6Vin Max, 85mV DO,
50mA Output
Adjustable Output
Voltage
LDO Selector (16Vin Max 100mA-150mA)

Choices Made
• Single Output
• 6.0 - 16Vin Max
• 100mA-150mA Output

TC1017
6Vin, 150mA Output,
53µA Operating Current

MCP1754
16Vin, 150mA Output
72dB PSRR

TC1055
6Vin, 100mA Output,
±0.5% Accuracy

MCP1754S
16Vin, 150mA Output
SOT-23A, SOT-89-3

TC1186
6Vin, 150mA Output,
85mV dropout

TC1187
6Vin, 150mA Output,
Adjustable Voltage Output

TC1071
6Vin, 100mA Output,
50µA Ground Current
LDO Selector (16Vin Max 200mA-300mA)

Choices Made
• Single Output
• 6.0 - 16Vin Max
• 200mA-300mA Output

MCP1700
6Vin, 250mA Output,
1.6µA Operating Current

MCP1702
13.2Vin, 250 Output,
2.0µA Operating Current

MCP1703A
16Vin, 250mA Output
±0.4% Accuracy

MCP1824
6Vin, 300mA Output,
Power Good(PG) Output

MCP1824S
6Vin, 300mA Output,
SOT-223-3
LDO Selector (16Vin Max 400mA-500mA)

Choices Made
• Single Output
• 6.0 - 16Vin Max
• 400mA-500mA Output

MCP1725
6Vin, 500mA Output
Power Good(PG) Output

MCP1825
6Vin, 500mA Output,
120µA Supply Current

MCP1825S
6Vin, 500mA Output,
SOT-223-5, TO-220-5,
DDPAK-5
LDO Selector (16Vin Max 1A-1.5A)

Choices Made
- Single Output
- 6.0 - 16Vin Max
- 1A-1.5A Output

MCP1726
6Vin, 1A Output
Adjustable Output Voltage

MCP1727
6Vin, 1.5A Output
Adjustable Output Voltage

MCP1826
6Vin, 1A Output,
Power Good(PG) Output

MCP1827
6Vin, 1.5A Output,
330mV DO

MCP1826S
6Vin, 1A Output,
SOT-223-5, TO-220-5,
DDPAK-5

MCP1827S
6Vin, 1.5A Output,
SOT-223-5, TO-220-5,
DDPAK-5
What is the MAX current output range?

- ≤70mA
- 100mA to 150mA
LDO Selector (36Vin Max 70mA)

Choices Made
• Single Output
• 18Vin- 36Vin Max
• $\leq 70$mA Output

MCP1790/1
30Vin Max, 70$\mu$A Low IQ, 90dB PSRR
LDO Selector (36Vin Max 150mA)

Choices Made
• Single Output
• 18Vin- 36Vin Max
• 100mA-150mA Output

MIC5233
36Vin Max, 100mA Output
IttyBitty® SOT-23-5
LDO Selector (Iout-1 38V to 120V)

What is the MAX current output range?

- $\leq 70\text{mA}$
- 100mA to 150mA
LDO Selector (120Vin Max 70mA)

Choices Made
- Single Output
- 38Vin- 120Vin Max
- ≤70mA Output

MAQ5280
120Vin Max, 25mA,
31μA Low IQ,
≥80dB PSRR
ADJ Output

MAQ5281
120Vin Max, 25mA,
6μA Ultra Low IQ,
≤90dB PSRR, ADJ
Output

MAQ5282
120Vin Max, 50mA,
6μA Ultra Low IQ,
80dB PSRR, ADJ
Output
LDO Selector (120Vin Max 150mA)

Choices Made
- Single Output
- 38Vin- 120Vin Max
- ≤150mA Output

MAQ5283
120Vin Max, 150mA,
8µA Low IQ, 75dB PSRR
ADJ Output