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Customer Evaluation Board for USB2228 in QFP-128 Package

Features

- Operates either USB Bus-powered or from a single voltage (+5.0V, regulated) 'wall wart' external power supply
- Low Cost 2-Layer Space-saving Design
- Supports these Media Types: Compact Flash, Micro Drive, MultiMediaCard, xD picture Card, Smart Media, Secure Digital, Memory Stick, High Speed Memory Stick, Memory Stick Pro
- Access to up to Four Memory Devices at the same time
- Software Upgradeable through On-Board Flash Socket
- Serial EEPROM capable
- Single Onboard +3.3V Regulator
- Internal FET Power Switching for All Media Types (except CF)
- Single Crystal Clock Source

General Description

The EVB-USB2228-CRB is a platform featuring USB2228 card reader. The board connects to a USB 2.0 port (J1), and optionally to a 5.0V external supply (J2: 2.1mm, tip -- POS). The board provides four media sockets supporting at least nine different media types. This board demonstrates a small footprint, low-cost implementation of the USB2228 with a robust feature set.

The card features an on-board EEPROM for configuration and serial number data, as well as a socket for a Flash device for firmware updates. The schematics for this board indicate which components are required for each programming and configuration option.

Power Consumption

These values represent a card with no media installed.

<table>
<thead>
<tr>
<th></th>
<th>Suspended</th>
<th>435uA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enumerated (Active and Idle)</td>
<td>55mA</td>
</tr>
</tbody>
</table>

Jumper Descriptions

ROMEN: J30

Jumper pins 1 & 2 to enable the Flash installed at U30.

Power Select: J3

Jumper pins 1 & 2 to select Bus Powered mode (USB-supplied power).
Jumper pins 2 & 3 to select Self Powered mode (externally-supplied 5.0V).

IrDA: J4

This connector is not used with the USB2228 device. This 6-pin header is provided to support the USB2230 device.
Board Illustrations

TOP Side

BOTTOM Side

EEPROM Configuration Settings

The EEPROM Default Configuration Settings are shown below. Please note that this card requires the Reverse SD Card Write Protect Sense bit to be set for correct operation.