Quad SPI memory

SDIO micro

SDIO slot is connected to SDIO location #0

External memory power switch
Ethernet PHY

ETH RMII is connected to
EFM32 Ethernet location #1

Ethernet jack

Place close to ethernet jack
Switch POS | Mode Description
---|---
AEM | AEM Enabled, VMCU sourced from external 3.3V LDO powered by BC USB 5V supply
USB | AEM Enabled, VMCU sourced from internal 3.3V LDO powered by MCU USB 5V supply
BAT | AEM Disabled, VMCU sourced from coin-cell battery or external power supply

USB Connection and ESD protection

USB Host Power enable

Schematic Title: EFM32 Giant Gecko 11 Starter Kit

Page Title: EFM32 Power & USB

Document number: BRD2204A
Stereo microphones

Place on board reverse side
I2C Sensor pull-ups

Relative Humidity & Temperature Sensor

Hall-effect sensor

Schematic Title
EFM32 Giant Gecko 11 Starter Kit

Document number
BRD2204A

Sheet Created Date
Tuesday, April 18, 2017

Sheet Modified Date
Tuesday, April 18, 2017

Sheet 10 of 16
MCU power regulator

Isolation switch

Buffered feedback network

MCU current sense

Sensed feedback network

Application

Input filter

Target USB Voltage Sense

Decoupling

MCU Voltage Sense

EFM32GG11 STK

Designed: DDB

Sheet: 1

Sheet Created Date: Thursday, November 03, 2016

Sheet Modified Date: Thursday, November 03, 2016

Document number: BRD2204A

Sheet: 1

Revision: B00

Review: A3

Approved: JNO

Sheet Date: December 03, 2008

"Bypass: remove R736 & R746 and add R745 to bypass current sense and filters completely if required for USB compliance testing."
Virtual COM Port Interface

Isolation

VMCU Voltage Mirror

Voltage Buffering

Power Supply for Analog Switches

The USB 5VUS voltage is used to bias these transistors, turning the F-Channel MOSFETs (Q707) off, and the N-Channel MOSFETs (Q709) on.

J-Link USB Cable

<table>
<thead>
<tr>
<th>Connected</th>
<th>Off</th>
<th>ON</th>
<th>3.6V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconnected</td>
<td>ON</td>
<td>OFF</td>
<td>VMCU Isolated</td>
</tr>
</tbody>
</table>

EFM32GG11 STK

EFM32 Giant Gecko 11 Starter Kit