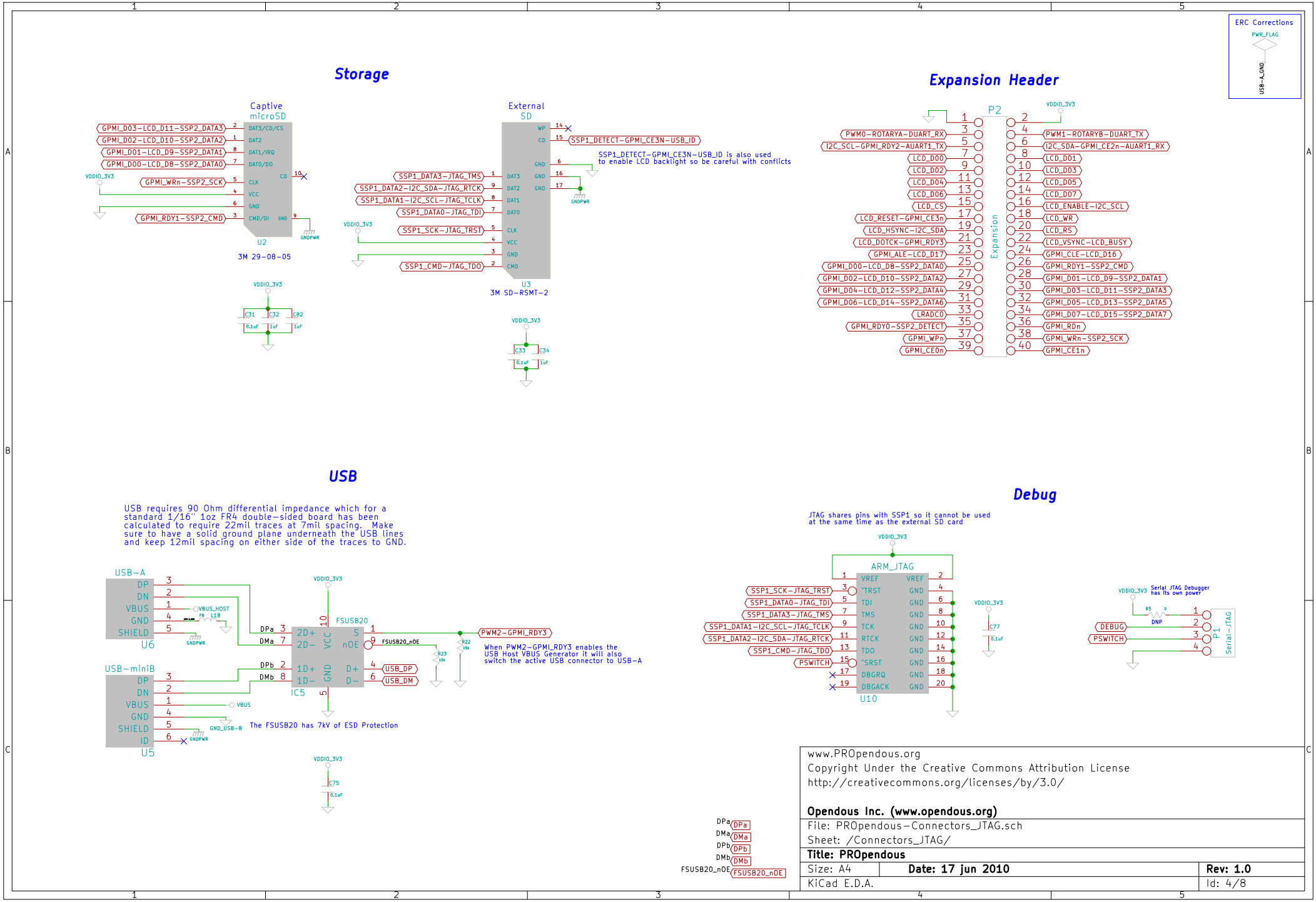
ERC Corrections
PWR_FLAG
USB-A_GND
Storage
Captive microSD
GPMI_D03-LCD_D11-SSP2_DATA3
GPMI_D02-LCD_D10-SSP2_DATA2
GPMI_D01-LCD_D9-SSP2_DATA1
GPMI_D00-LCD_D8-SSP2_DATA0
GPMI_WRn-SSP2_SCK
GPMI_RDY1-SSP2_CMD
DAT3/CD/CS
DAT2
DAT1/IRQ
DAT0/DO
CLK
VCC
GND
CMD/DI
CD
U2
3M 29-08-05
VDDIO_3V3
GNDPWR
C31 0.1uF
C32 1uF
C82 1uF
External SD
SSP1_DETECT-GPMI_CE3N-USB_ID
SSP1_DETECT-GPMI_CE3N-USB_ID is also used to enable LCD backlight so be careful with conflicts
SSP1_DATA3-JTAG_TMS
SSP1_DATA2-I2C_SDA-JTAG_RTCK
SSP1_DATA1-I2C_SCL-JTAG_TCLK
SSP1_DATA0-JTAG_TDI
SSP1_SCK-JTAG_TRST
SSP1_CMD-JTAG_TDO
WP
CD
DAT3
DAT2
DAT1
DAT0
CLK
VCC
GND
CMD
U3
3M SD-RSMT-2
C33 0.1uF
C34 1uF
Expansion Header
P2
Expansion
PWM0-ROTARYA-DUART_RX
I2C_SCL-GPMI_RDY2-AUART1_TX
LCD_D00
LCD_D02
LCD_D04
LCD_D06
LCD_CS
LCD_RESET-GPMI_CE3n
LCD_HSYNC-I2C_SDA
LCD_DOTCK-GPMI_RDY3
GPMI_ALE-LCD_D17
GPMI_D00-LCD_D8-SSP2_DATA0
GPMI_D02-LCD_D10-SSP2_DATA2
GPMI_D04-LCD_D12-SSP2_DATA4
GPMI_D06-LCD_D14-SSP2_DATA6
LRADC0
GPMI_RDY0-SSP2_DETECT
GPMI_WPn
GPMI_CE0n
PWM1-ROTARYB-DUART_TX
I2C_SDA-GPMI_CE2n-AUART1_RX
LCD_D01
LCD_D03
LCD_D05
LCD_D07
LCD_ENABLE-I2C_SCL
LCD_WR
LCD_RS
LCD_VSYNC-LCD_BUSY
GPMI_CLE-LCD_D16
GPMI_RDY1-SSP2_CMD
GPMI_D01-LCD_D9-SSP2_DATA1
GPMI_D03-LCD_D11-SSP2_DATA3
GPMI_D05-LCD_D13-SSP2_DATA5
GPMI_D07-LCD_D15-SSP2_DATA7
GPMI_RDn
GPMI_WRn-SSP2_SCK
GPMI_CE1n
USB
USB requires 90 Ohm differential impedance which for a standard 1/16" 1oz FR4 double-sided board has been calculated to require 22mil traces at 7mil spacing. Make sure to have a solid ground plane underneath the USB lines and keep 12mil spacing on either side of the traces to GND.
USB-A
DP
DN
VBUS
GND
SHIELD
U6
VBUS_HOST
FB L18
USB-miniB
ID
U5
VBUS
GND_USB-B
DPa
DMa
DPb
DMb
IC5
FSUSB20
2D+
2D-
1D+
1D-
VCC
GND
S
nOE
D+
D-
FSUSB20_nOE
USB_DP
USB_DM
R22 15k
R23 15k
PWM2-GPMI_RDY3
When PWM2-GPMI_RDY3 enables the USB Host VBUS Generator it will also switch the active USB connector to USB-A
The FSUSB20 has 7kV of ESD Protection
C75 0.1uF
Debug
JTAG shares pins with SSP1 so it cannot be used at the same time as the external SD card
ARM_JTAG
VREF
~TRST
TDI
TMS
TCK
RTCK
TDO
~SRST
DBGRQ
DBGACK
GND
U10
SSP1_SCK-JTAG_TRST
SSP1_DATA0-JTAG_TDI
SSP1_DATA3-JTAG_TMS
SSP1_DATA1-I2C_SCL-JTAG_TCLK
SSP1_DATA2-I2C_SDA-JTAG_RTCK
SSP1_CMD-JTAG_TDO
PSWITCH
C77 0.1uF
Serial JTAG Debugger has its own power
R5 0 DNP
DEBUG
P1
Serial-JTAG
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Opendous Inc. (www.opendous.org)
File: PROpendous-Connectors_JTAG.sch
Sheet: /Connectors_JTAG/
Title: PROpendous
Size: A4
Date: 17 jun 2010
Rev: 1.0
KiCad E.D.A.
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