

Table of Contents	
DDR SDRAM	Sheet 2
Serial Communications	Sheet 3
Power Supply	Sheet 4
Reset Configuration	Sheet 5
10/100 Ethernet	Sheet 6
BDM Connector	Sheet 7
I/O Header	Sheet 8
Flash & SRAM	Sheet 9
ZigBee Transciever	Sheet 10
Reset & IRQ	Sheet 11
MCU Power Rails	Sheet 12
Clock	Sheet 13

Revision History

Rev.	Date	Designer	Comments
A	18 Apr. 05	G Rouse	Initial release.
B	30 Aug. 05	G Rouse	Changed U3 to ST LD29080. Changed U9-VIN to 3V3. Removed unnecessary jumpers. Renamed jumpers. Added 10K pullup to *ATTN. Rationalized resistors into resistor packs. Renamed MCF5208 signal names for consistency with MCF5208RM.pdf.

M5208EVB Evaluation Board

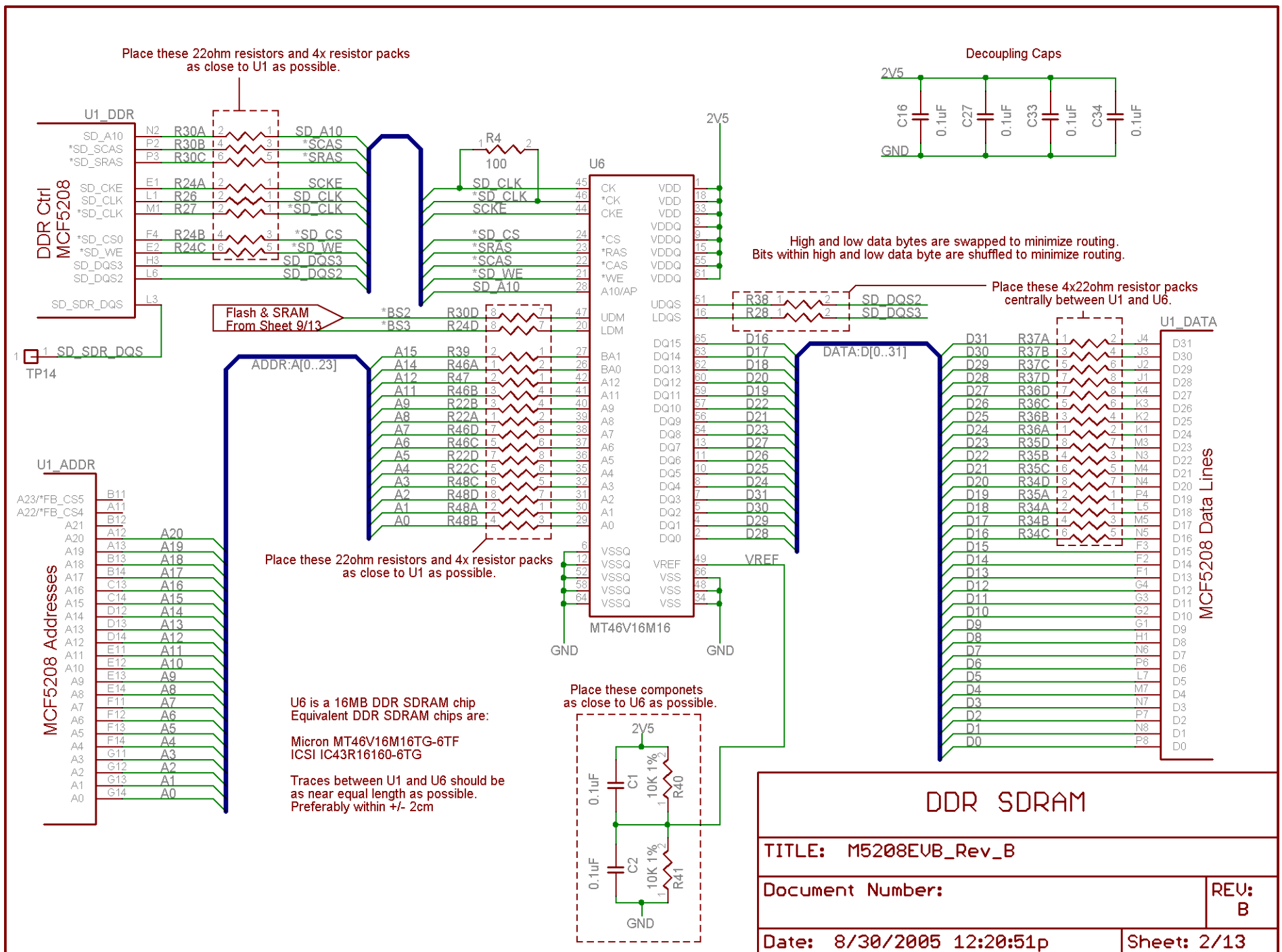
TITLE: M5208EVB_Rev_B

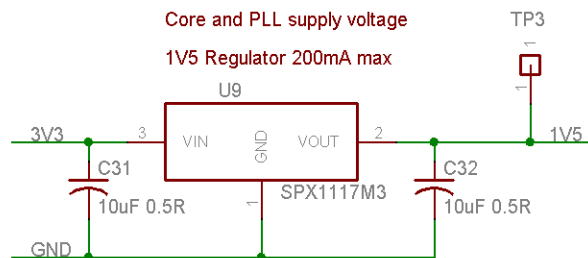
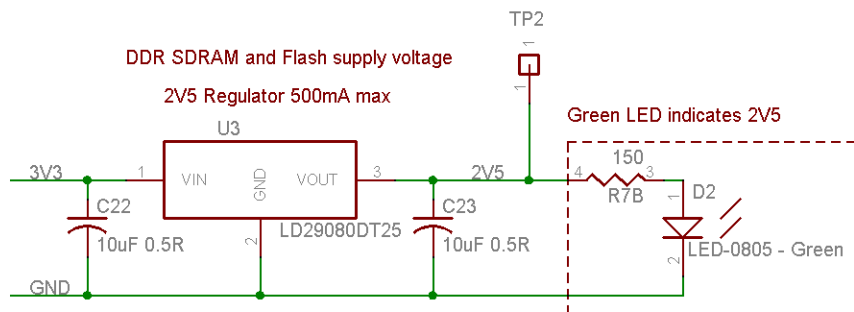
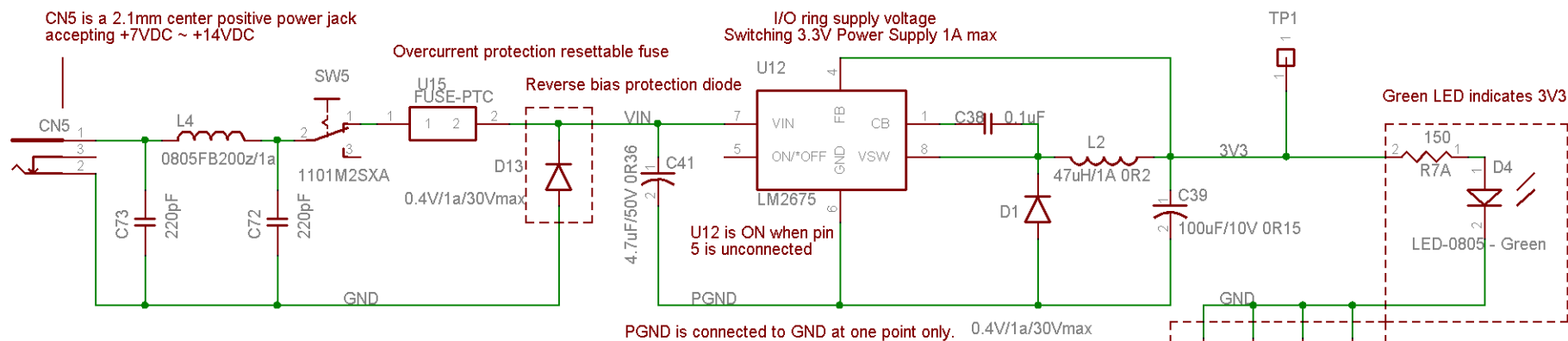
Document Number:

REV:
B

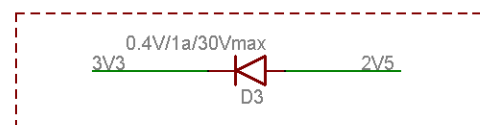
Date: 8/30/2005 12:20:51p

Sheet: 1/13

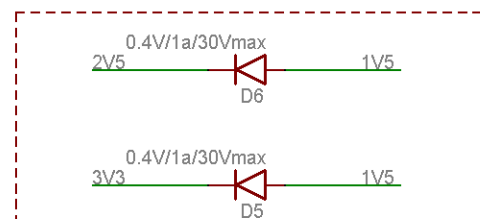




Shottky diode feedback to prevent 2V5 from exceeding 3V3 during shutdown



Shottky diodes feedback to prevent 1V5 from exceeding 3V3 or 2V5 during shutdown



Power Supply

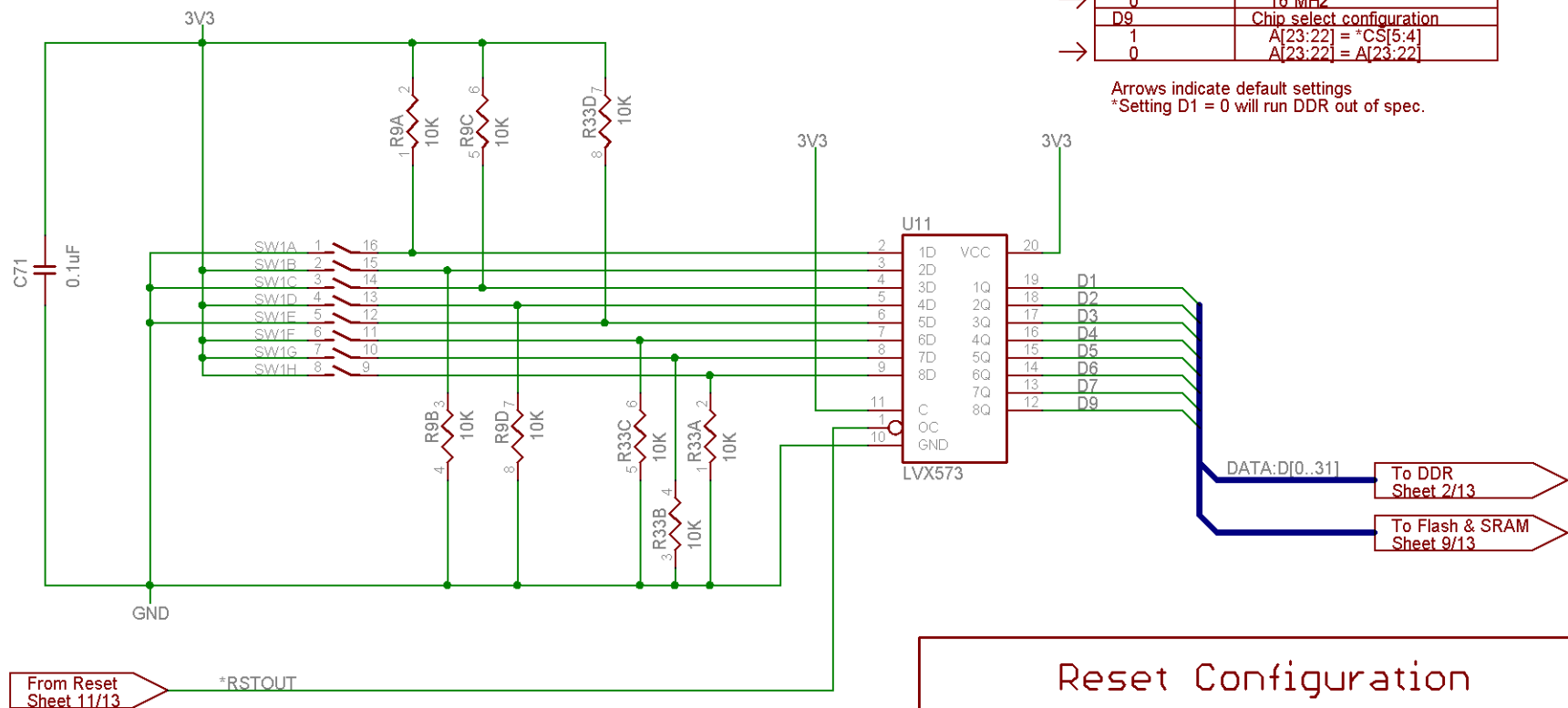
TITLE: M5208EVB_Rev_B

Document Number:

REV:
B

Date: 8/30/2005 12:20:51p

Sheet: 4/13



Reset Configuration

→	D1	PLL Mode
	1	166.67/83.33 MHz operation
	0	88/44 MHz operation *
→	D2	Oscillator Mode
	1	Oscillator bypass mode
	0	Crystal oscillator mode
→	D[4:3]	Boot port size
	00, 11	32-bit port
	01	16-bit port
	10	8-bit port
→	D5	Output pad drive strength
	1	High drive strength
	0	Low drive strength
→	D6	Limp mode
	1	Limp mode
	0	Normal PLL mode
→	D7	Clock Frequency Input
	1	16.67 MHz
	0	16 MHz
→	D9	Chip select configuration
	1	A[23:22] = *CS[5:4]
	0	A[23:22] = A[23:22]

Arrows indicate default settings
 *Setting D1 = 0 will run DDR out of spec.

Reset Configuration

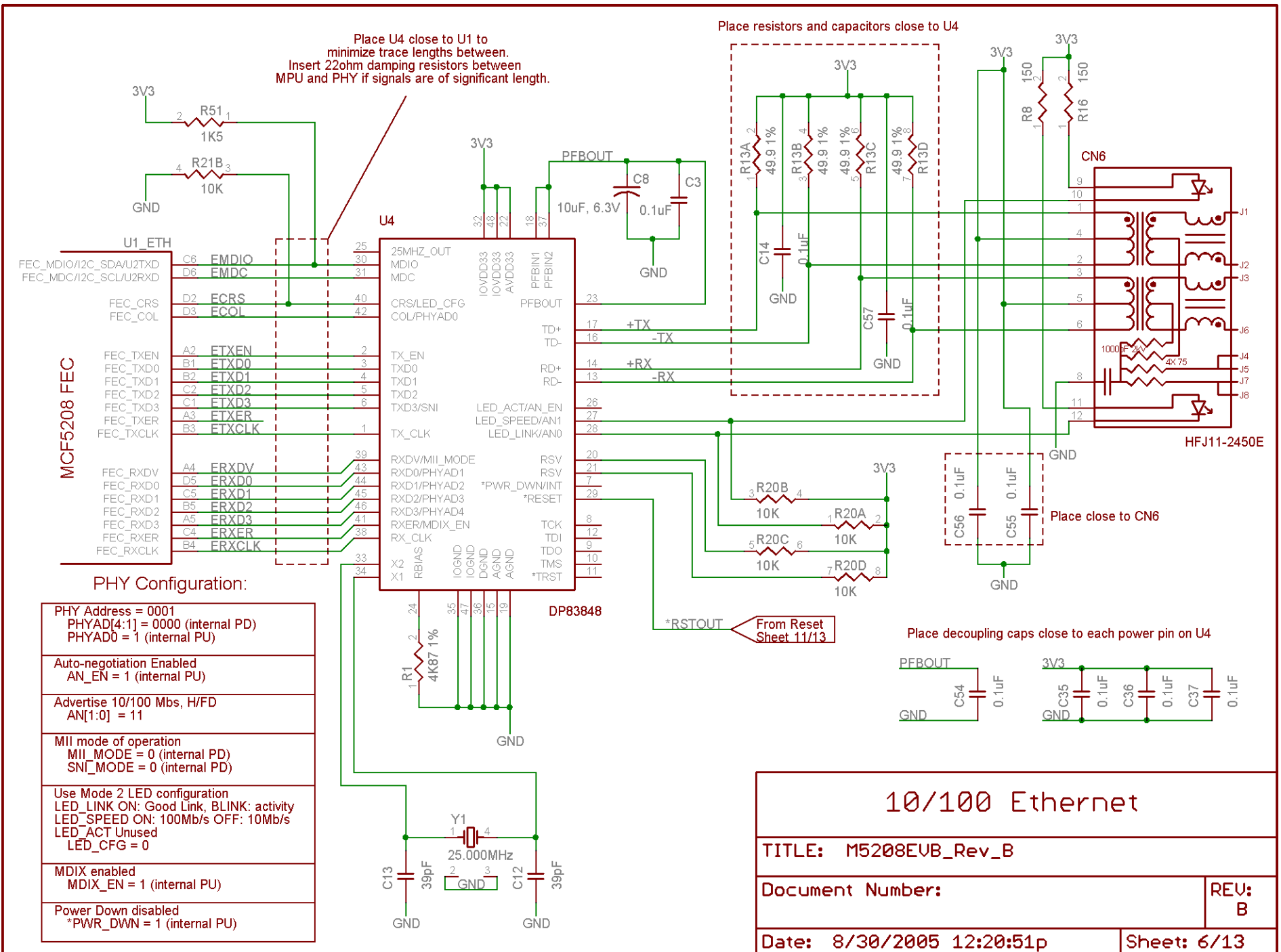
TITLE: M5208EVB_Rev_B

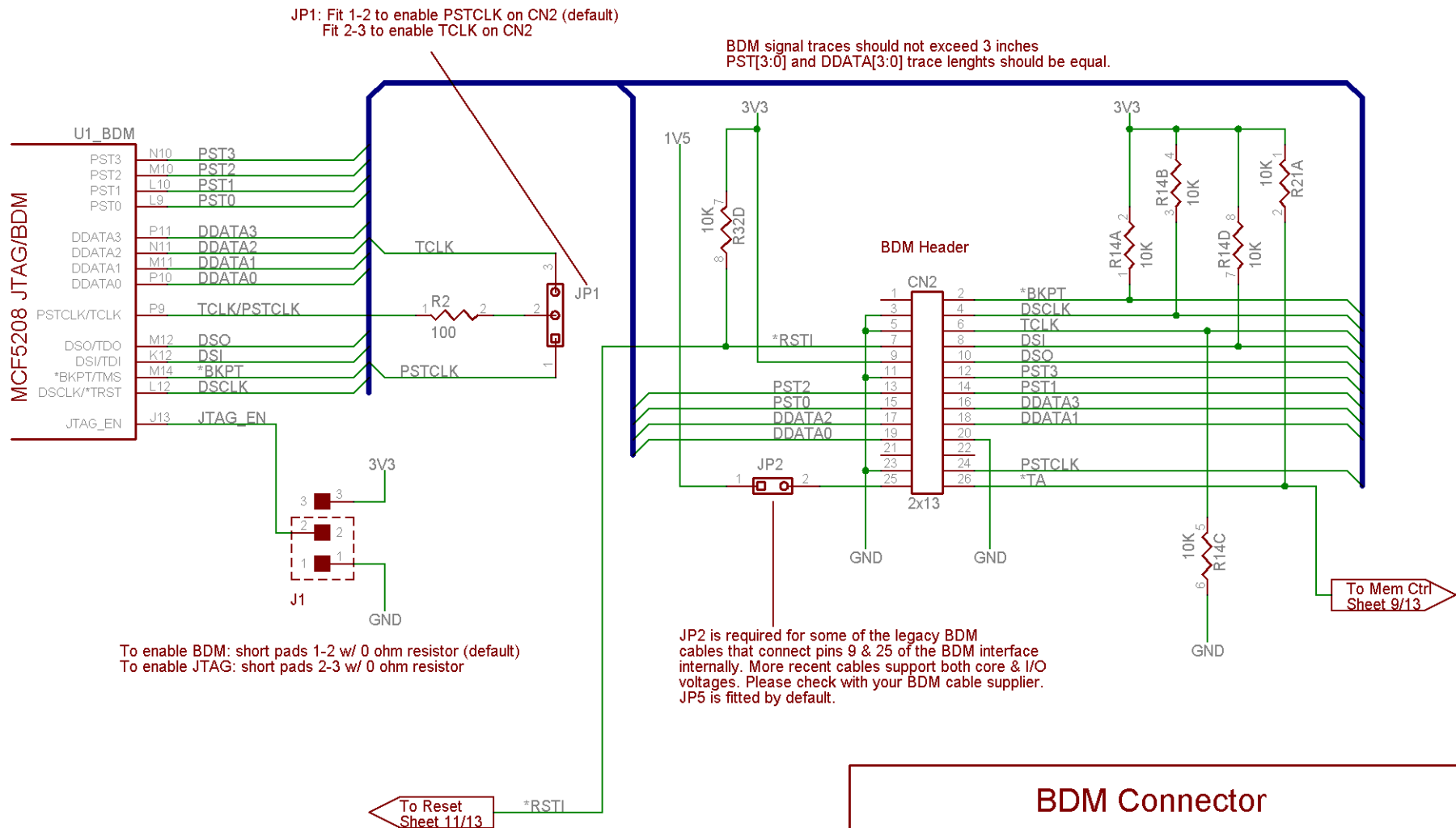
Document Number:

REV:
B

Date: 8/30/2005 12:20:51p

Sheet: 5/13





BDM Connector

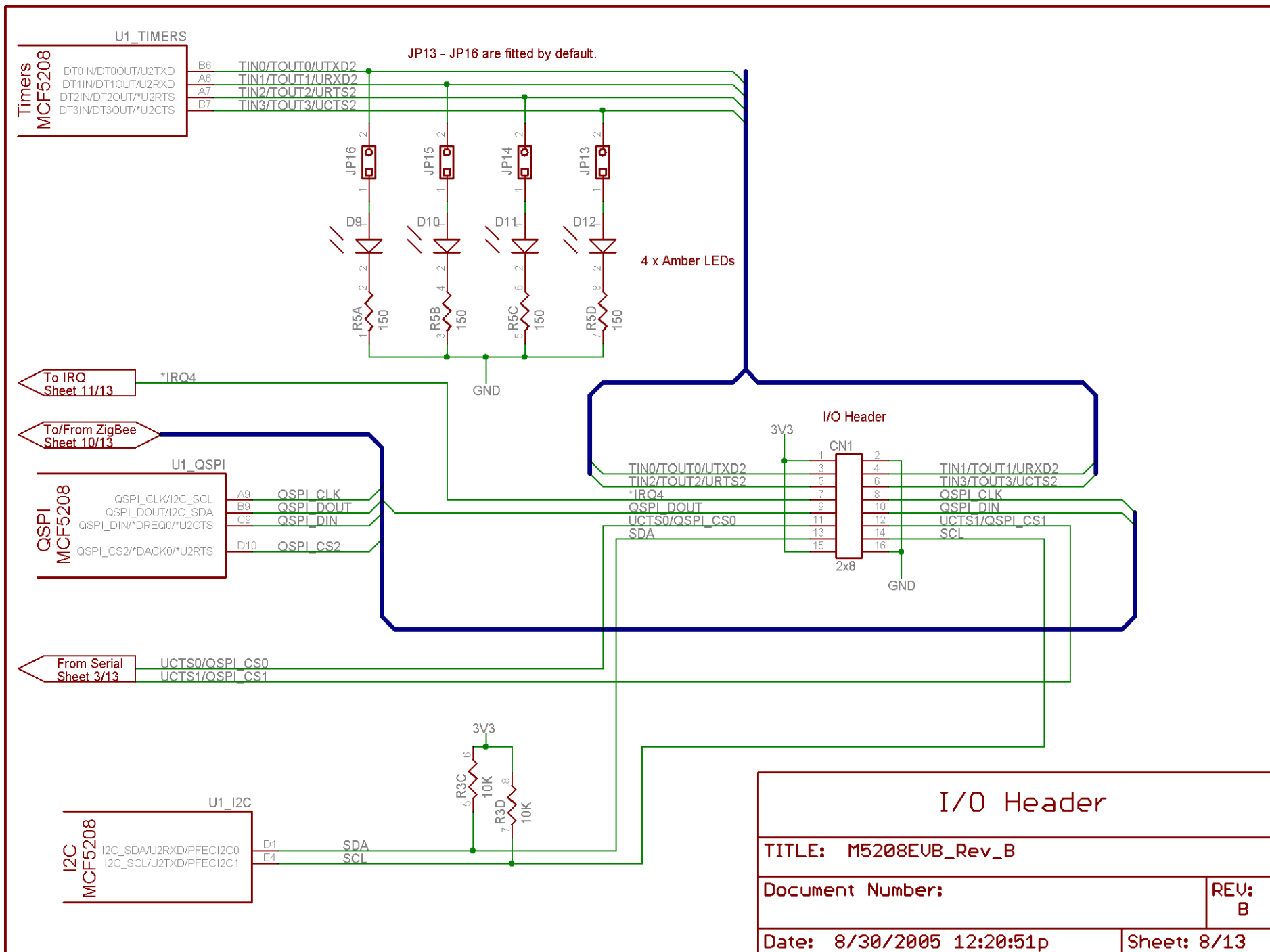
TITLE: M5208EVB_Rev_B

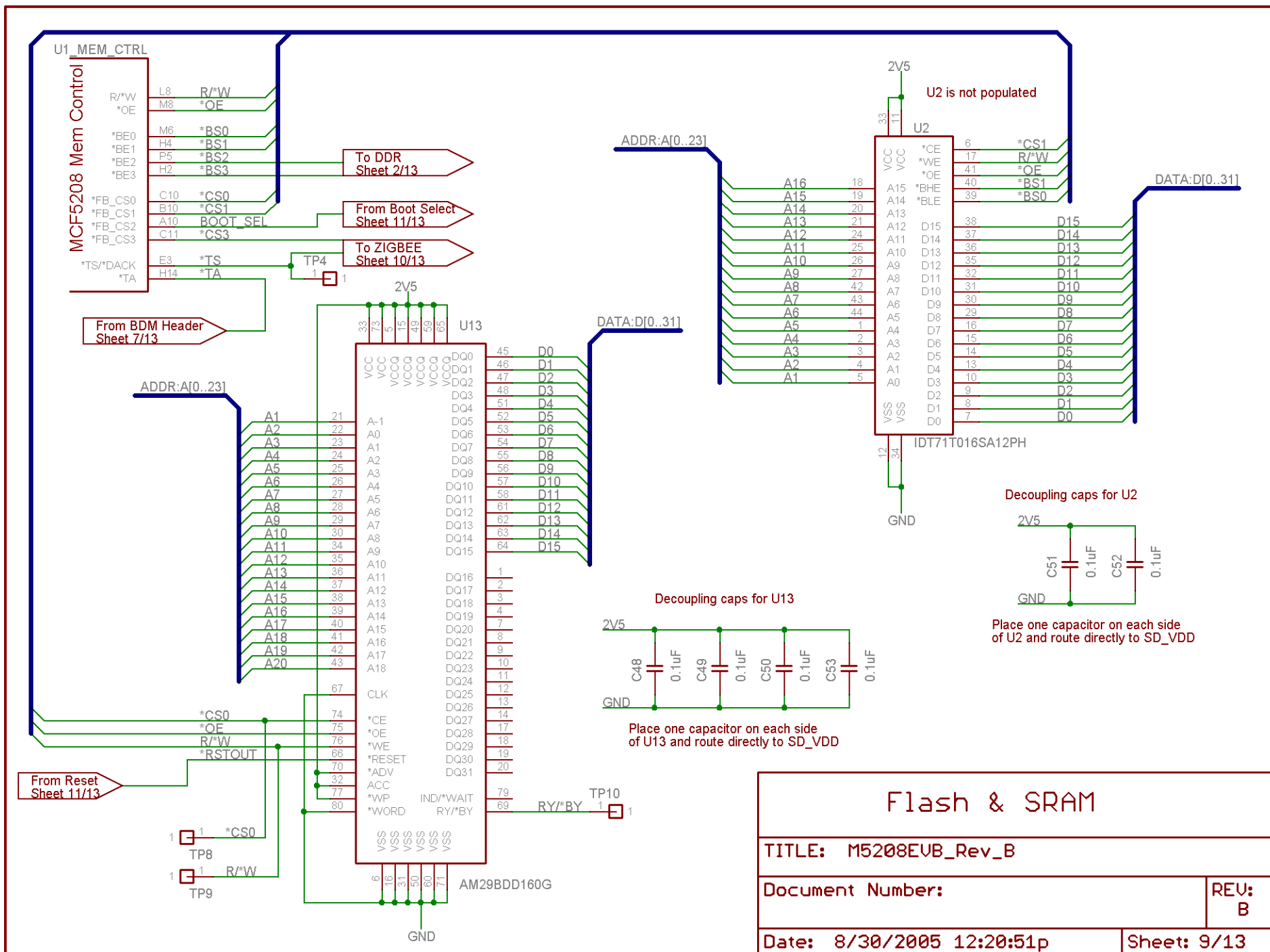
Document Number:

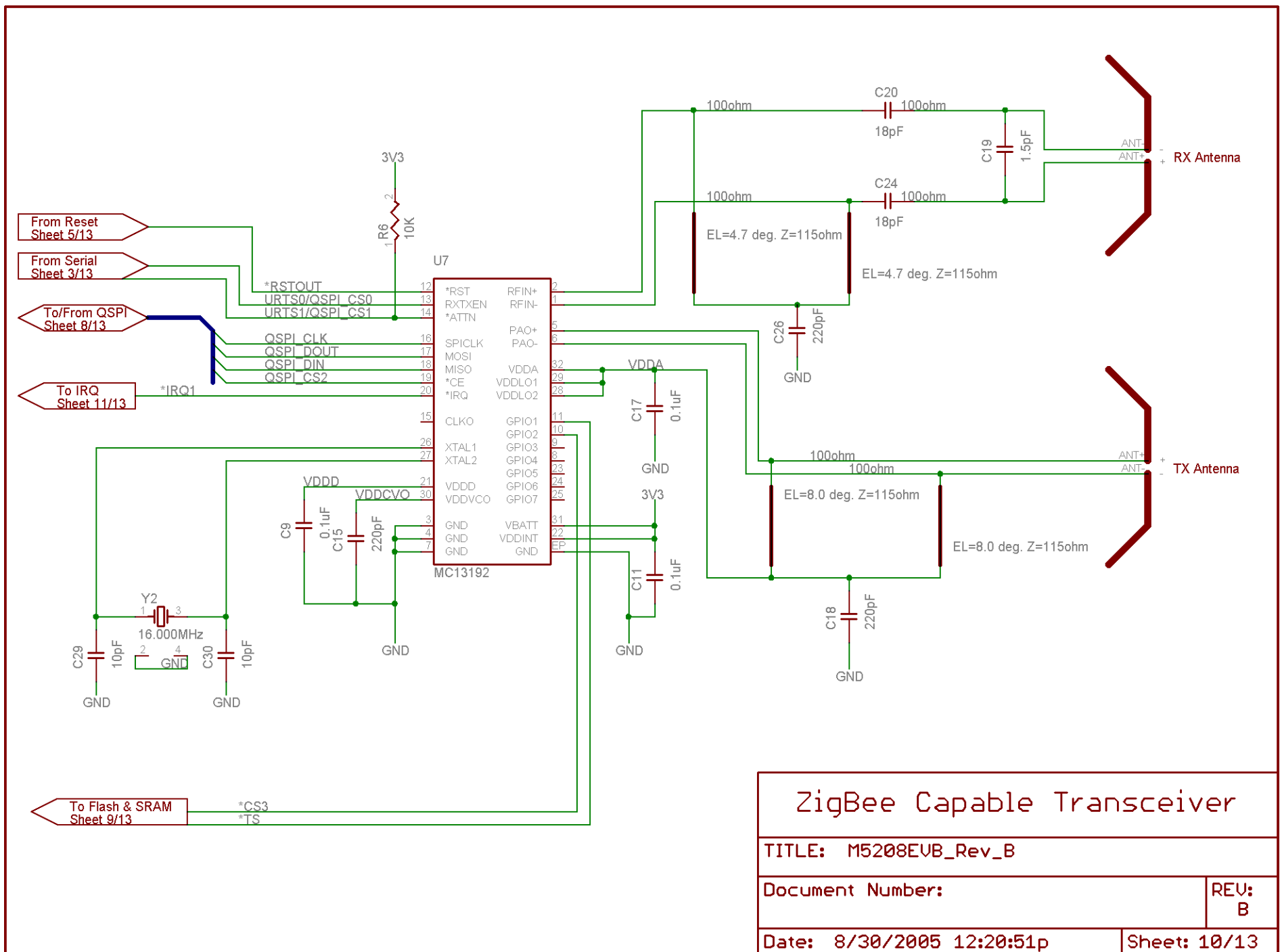
REV:
B

Date: 8/30/2005 12:20:51p

Sheet: 7/13







ZigBee Capable Transceiver

TITLE: M5208EVB_Rev_B

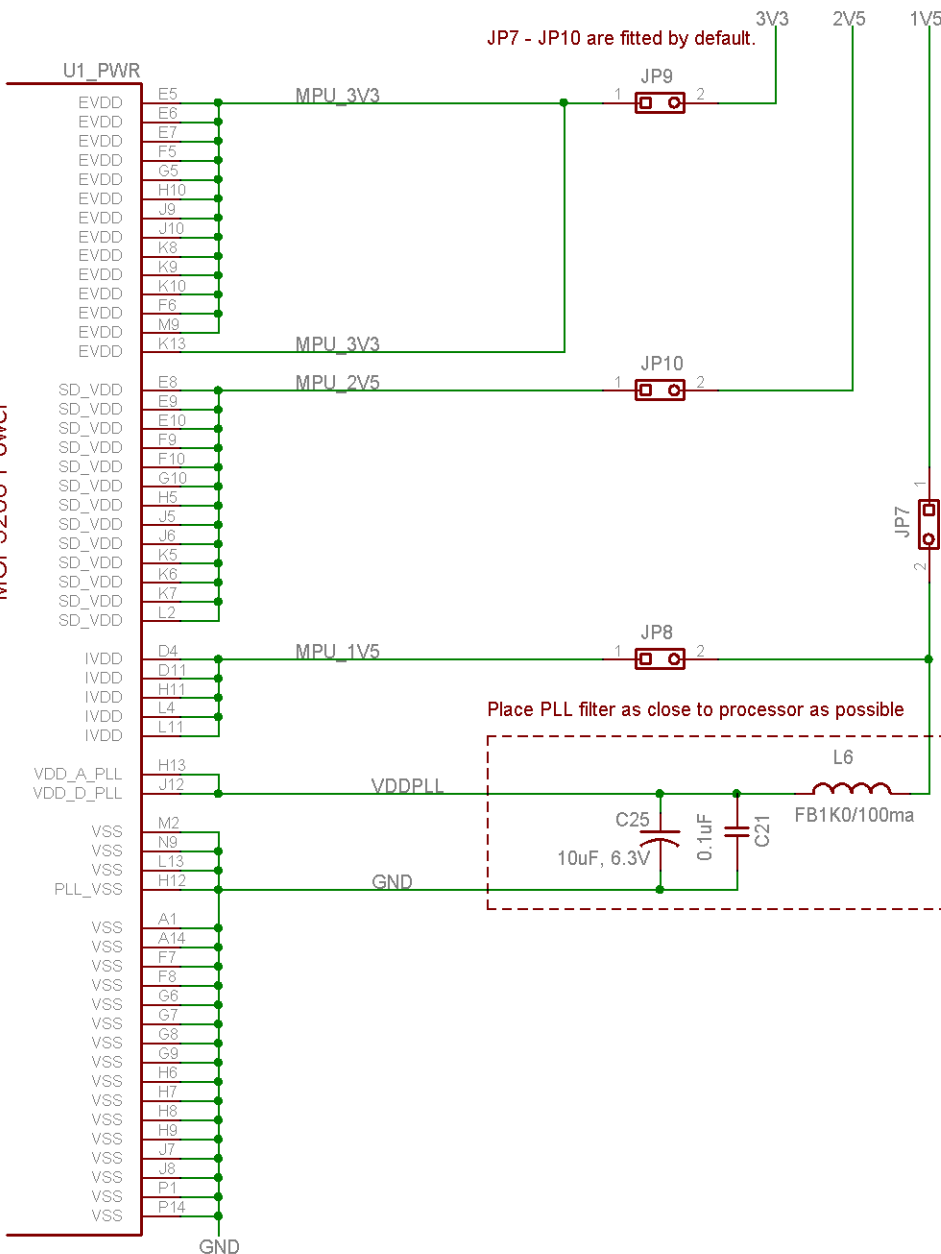
Document Number:

REV:
B

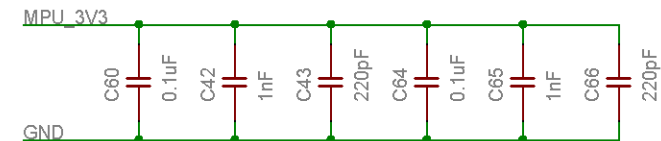
Date: 8/30/2005 12:20:51p

Sheet: 10/13

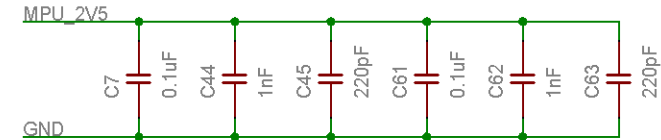
MCF5208 Power



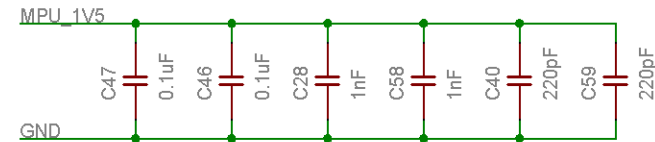
3.3V Decoupling



2.5V Decoupling



1.5V Decoupling



MCU Power Rails

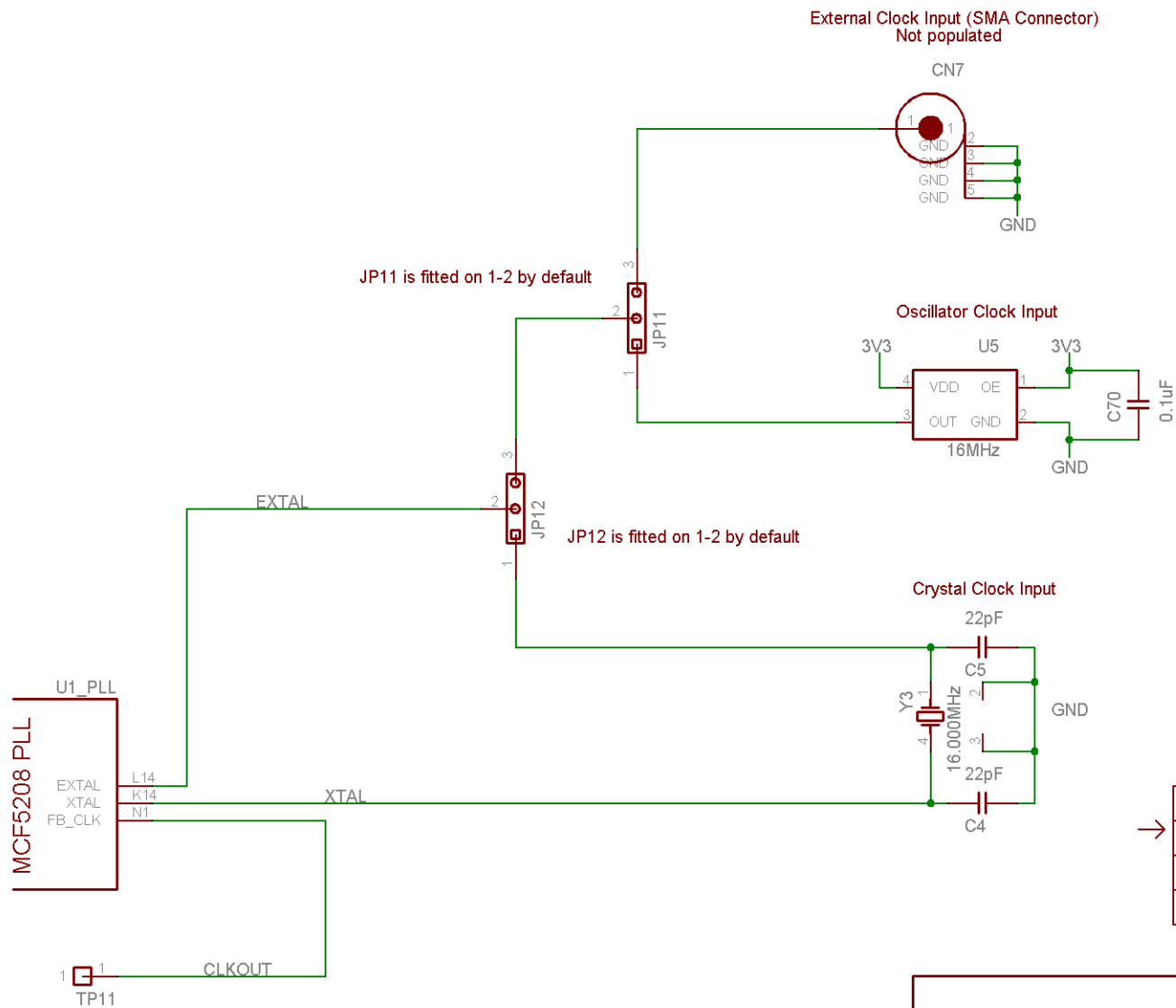
TITLE: M5208EVB_Rev_B

Document Number:

REV:
B

Date: 8/30/2005 12:20:51p

Sheet: 12/13



Clock Input Selection

→

Clock Source	JP11	JP12
16MHz Crystal	1-2	---
16MHz Oscillator	2-3	1-2
External Clock	2-3	2-3

Clock

TITLE: M5208EVB_Rev_B

Document Number:

REV:
B

Date: 8/30/2005 12:20:51p

Sheet: 13/13