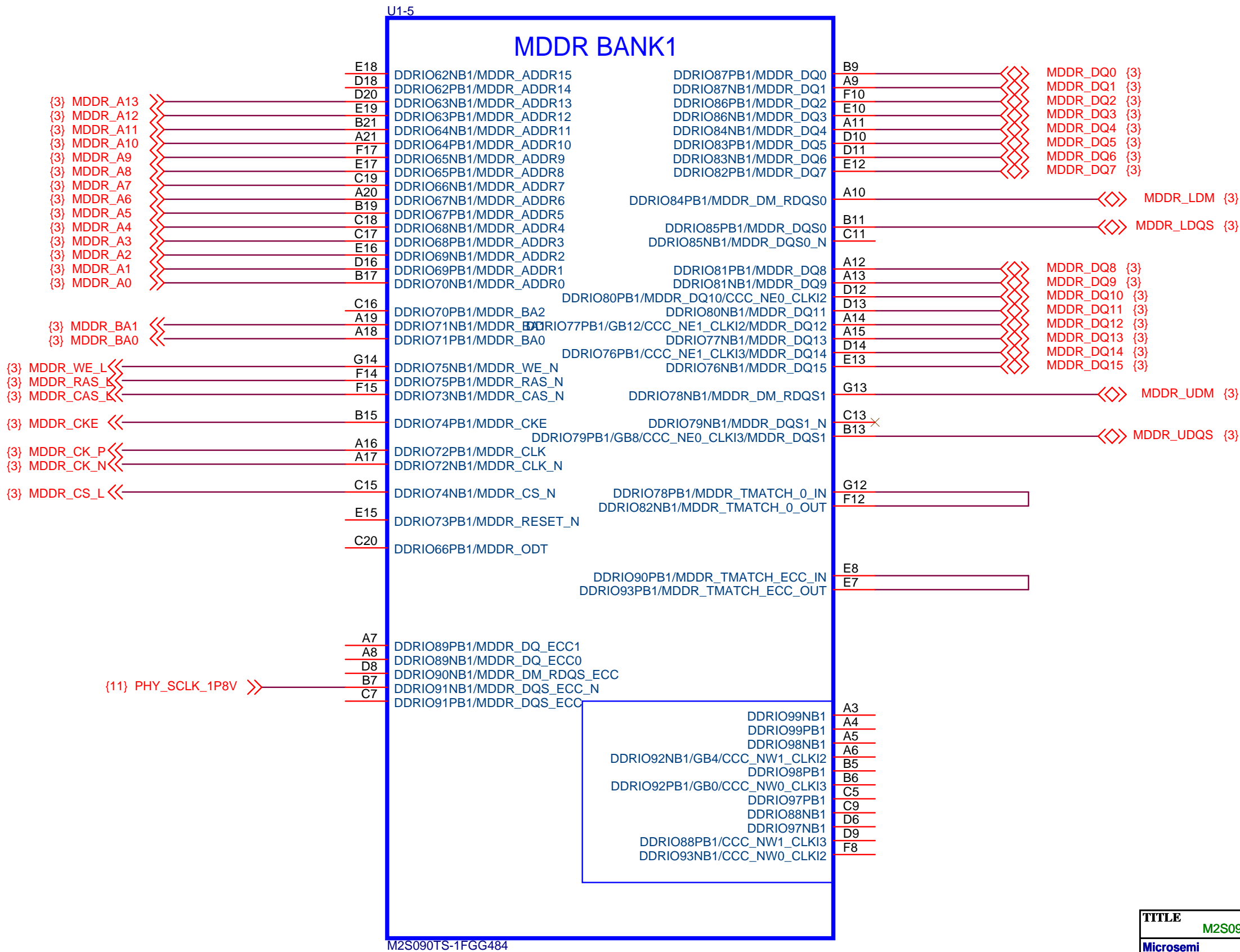


# M2S090S-EVAL-KIT

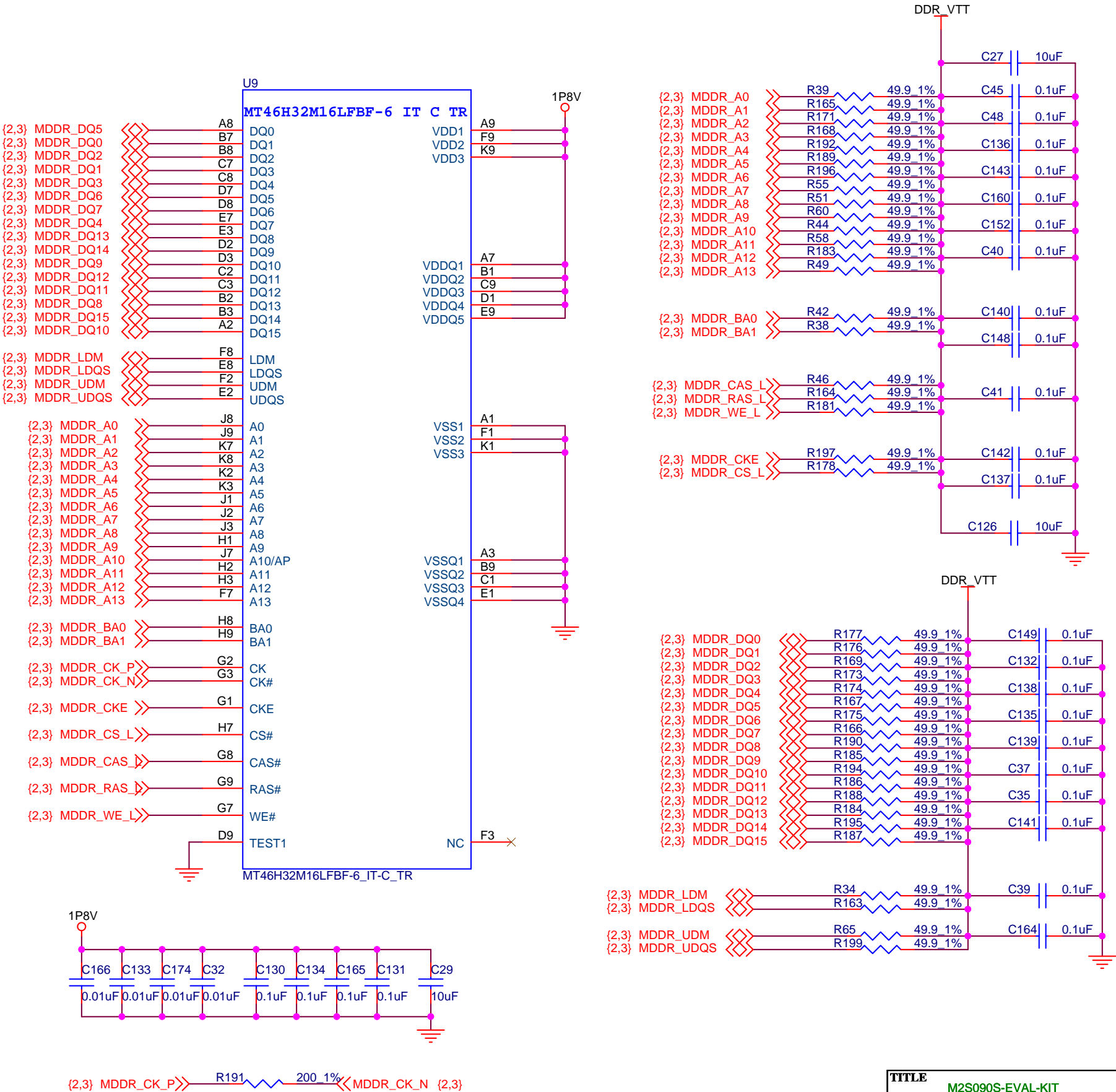
Microsemi Corporation	
Page	Schematic Title
01	TITLE AND INDEX
02	FG484 DDR INTERFACE
03	LPDDR MEMORY INTERFACE
04	SERDES 0 INTERFACE
05	BANK 2 & 3 CONNECTION
06	BANK 5,7 & 8 CONNECTION
07	GPIO HEADER
08	JTAG,I2C & SPI INTERFACE
09	SF2-POWER AND GROUND CONNECTION
10	USB INTERFACE
11	MARVELL PHY INTERFACE
12	MARVELL PHY INTERFACE
13	PROGRAMMING CIRCUITRY
14	FT4232H CONNECTION
15	DEBUGGING CIRCUITRY
16	POWER SUPPLIES 1
17	POWER SUPPLIES 2
18	POWER SUPPLIES 3
19	POWER SUPPLIES 4
20	POWER SUPPLIES 5
21	POWER SUPPLIES 6
22	POWER SUPPLIES 7 & LED

# MDDR - BANK1 INTERFACES



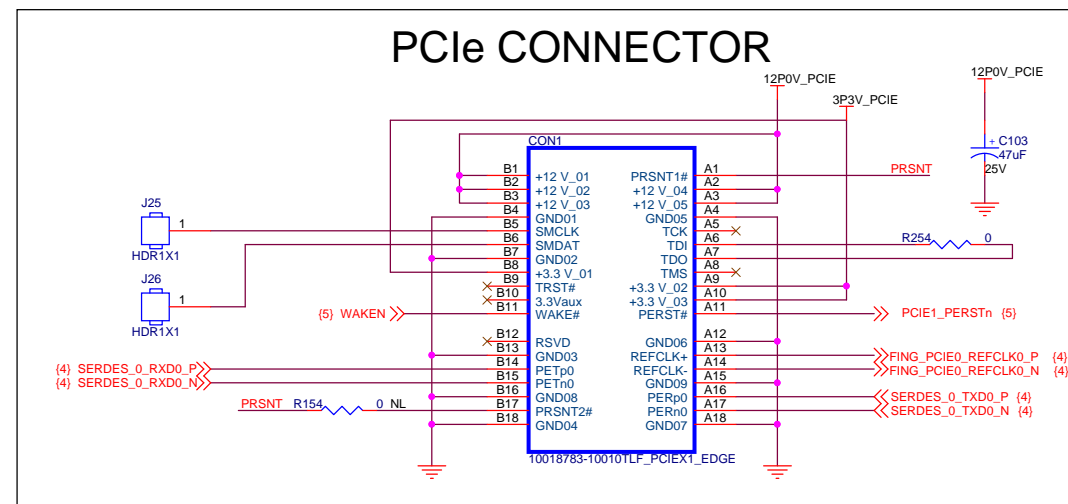
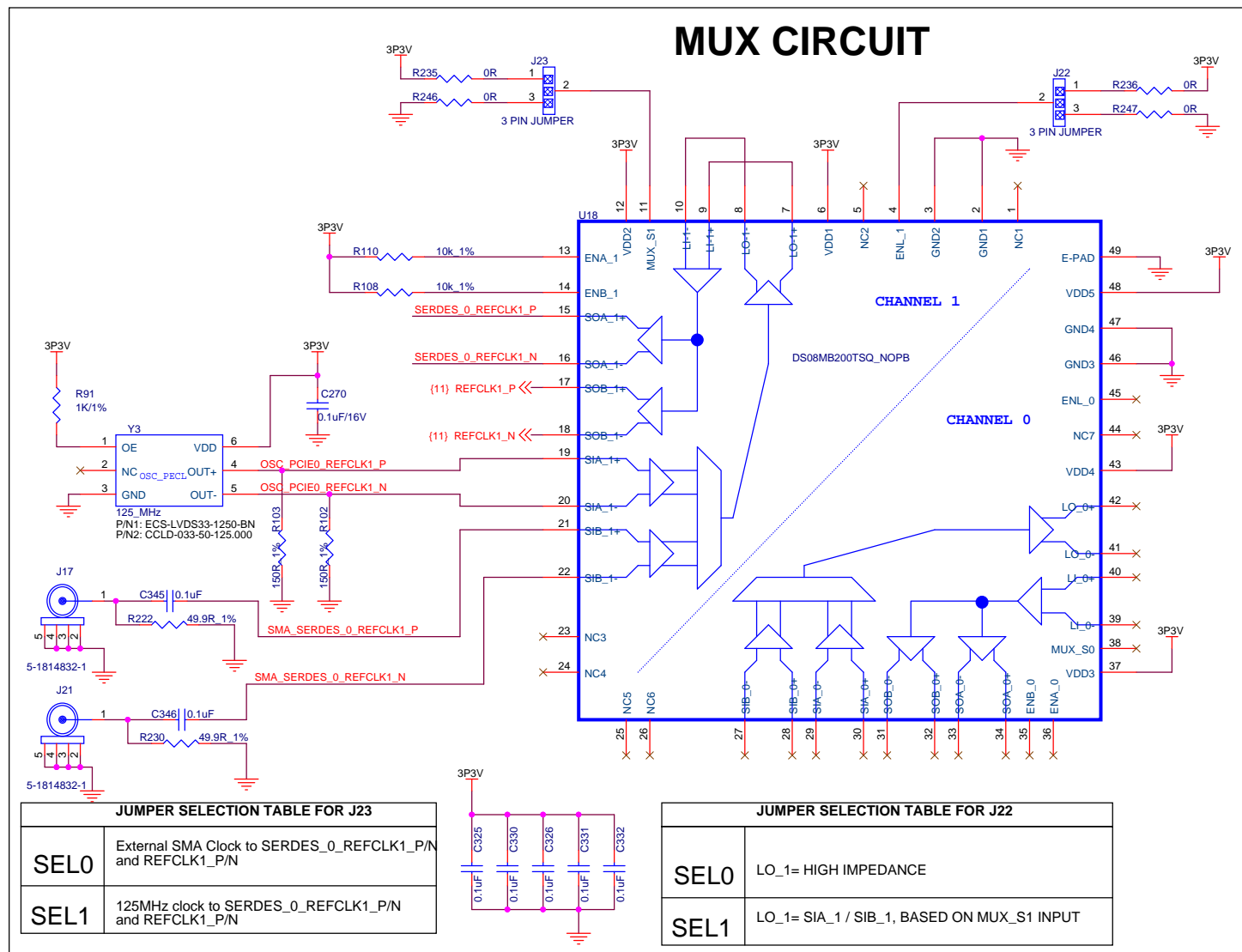
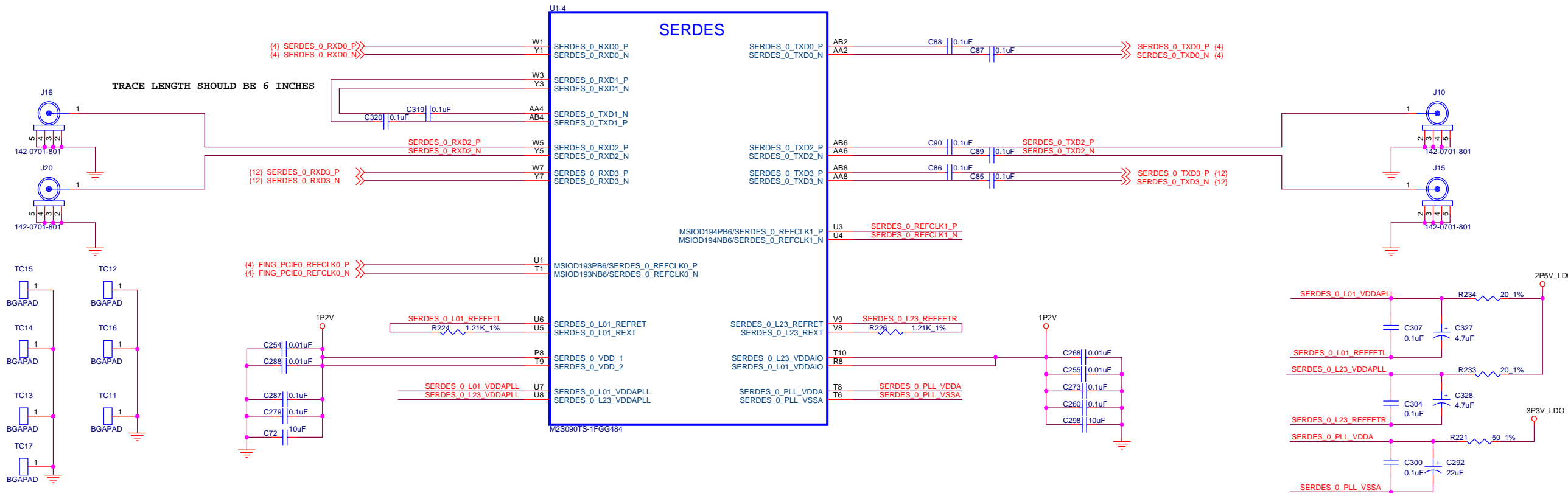
TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 2 OF 22

LPDDR MEMORY INTERFACE



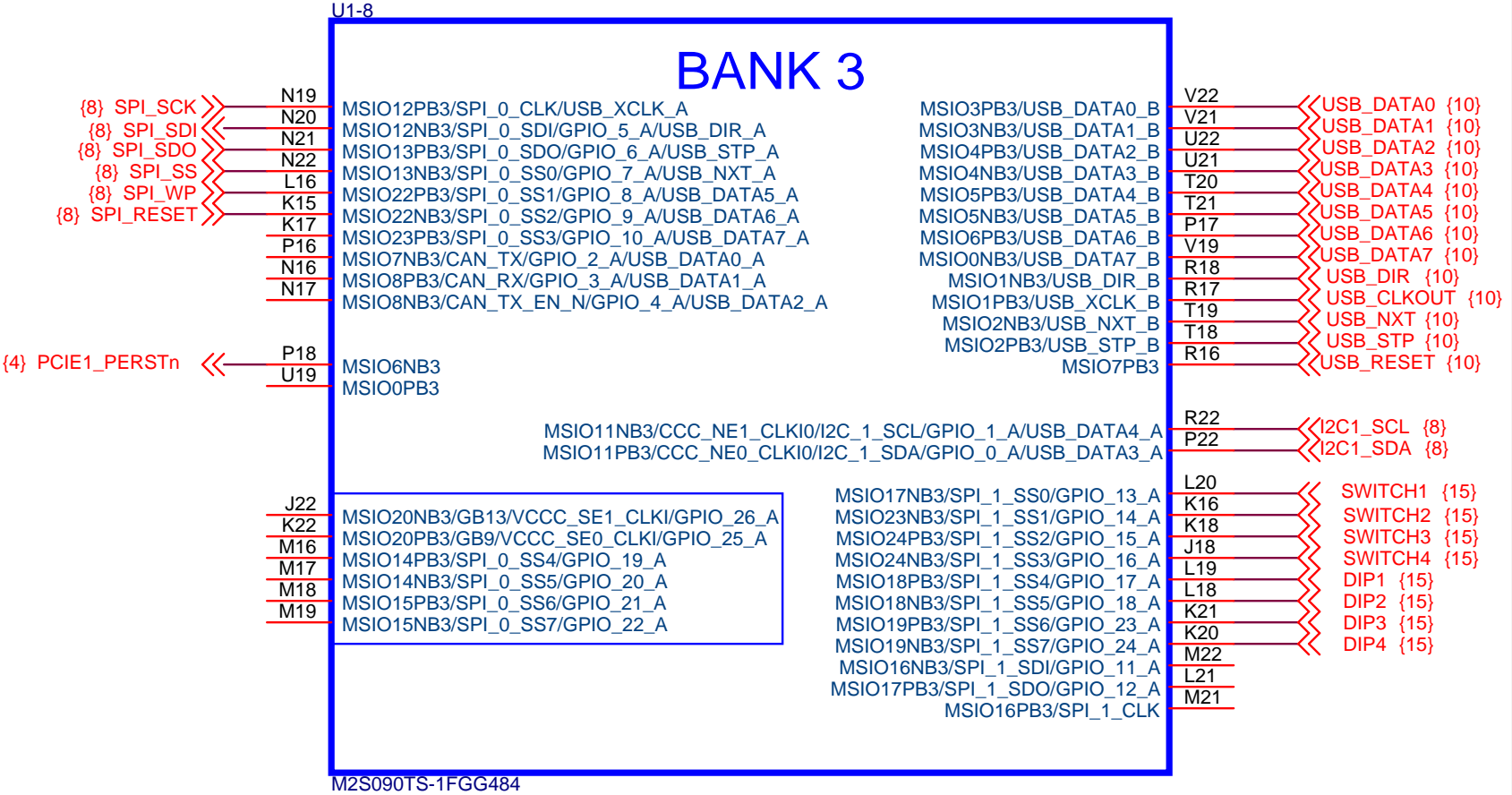
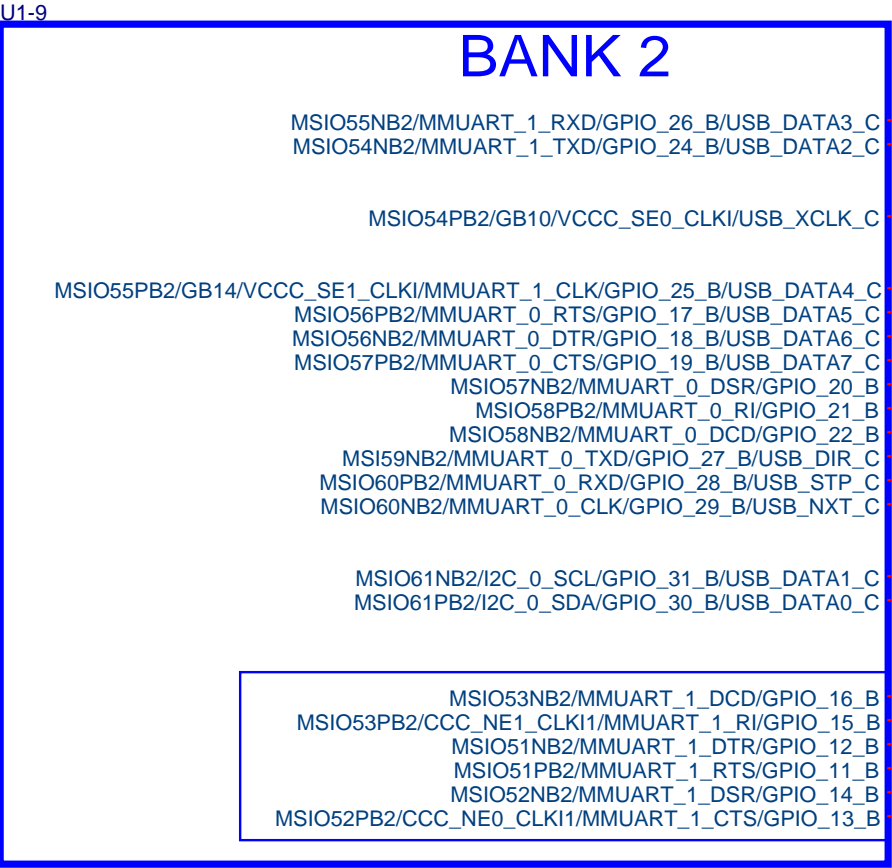
TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 3 OF 22

## SERDES0 (PCIe & SMA INTERFACES)



<b>TITLE</b>			
M2S090S-EVAL-KIT			
Microsemi			
<b>SIZE</b>	<b>DOCUMENT NO.</b>		<b>REV</b>
C			D
<b>DATE:</b>	Friday, June 20, 2014	<b>SH</b>	<b>4 OF 22</b>

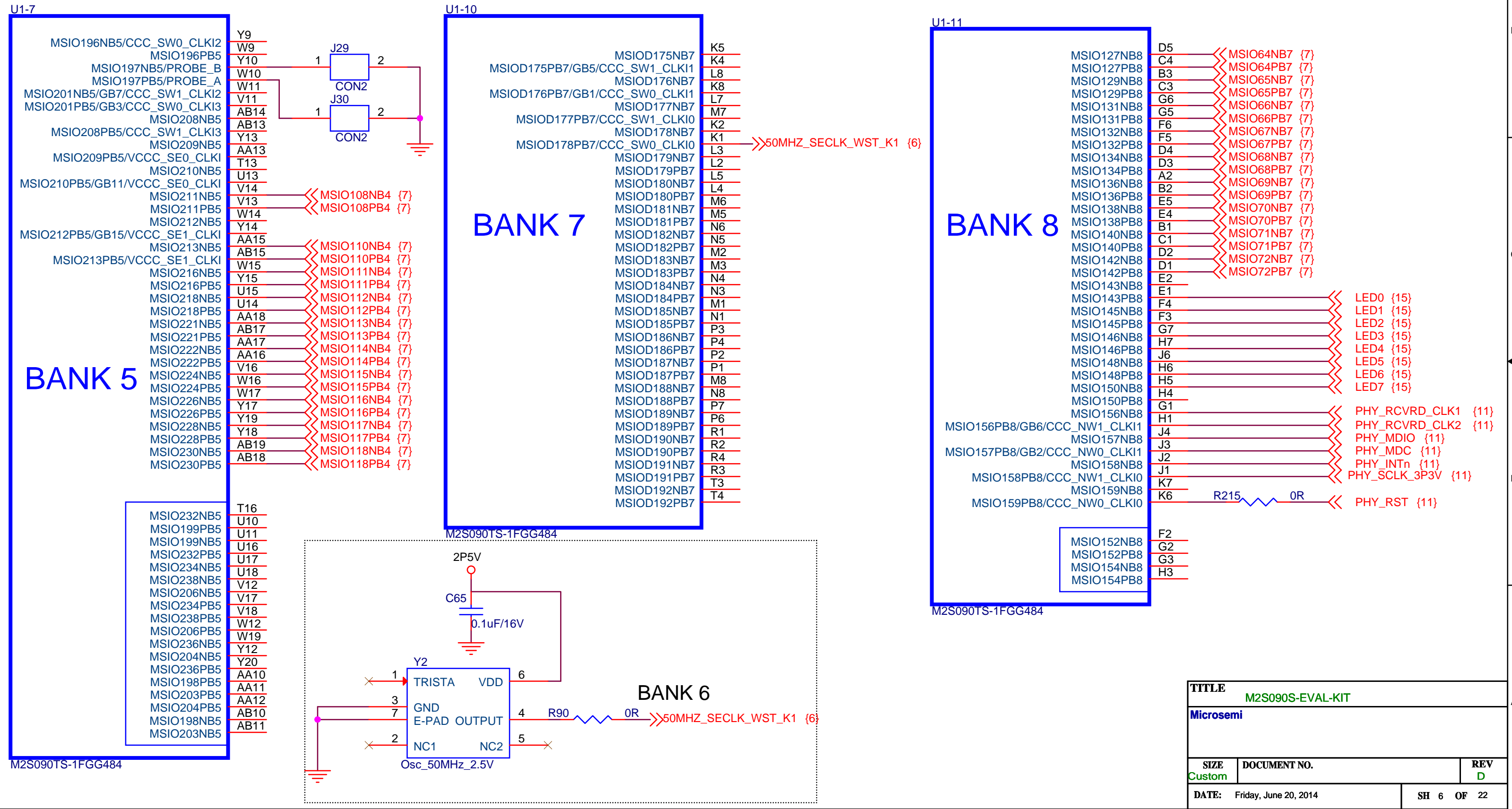
BANK2 & BANK3 CONNECTIONS



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 5 OF 22

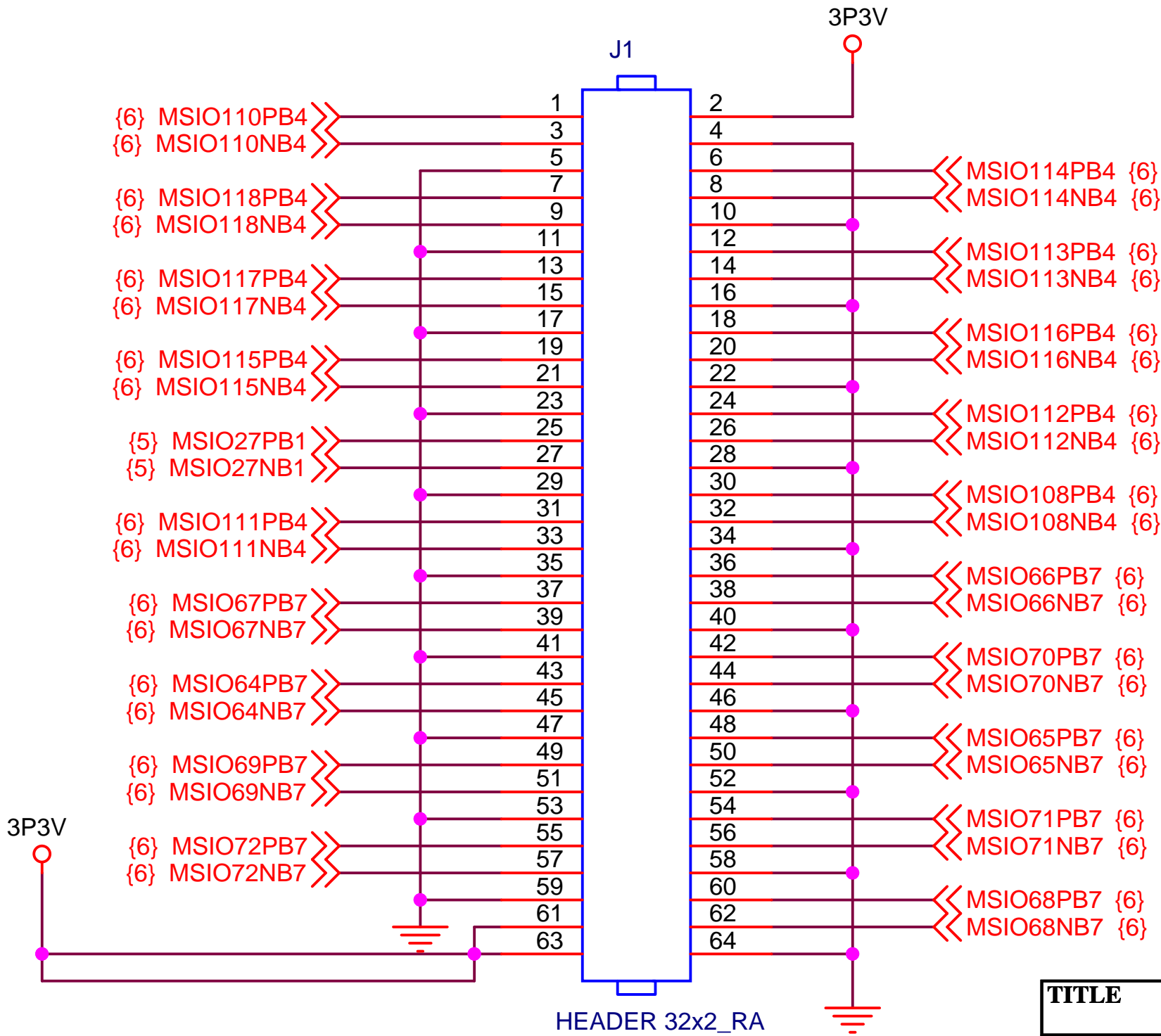


# BANK 5, 7 and 8 CONNECTIONS



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 6 OF 22

# GPIO HEADER

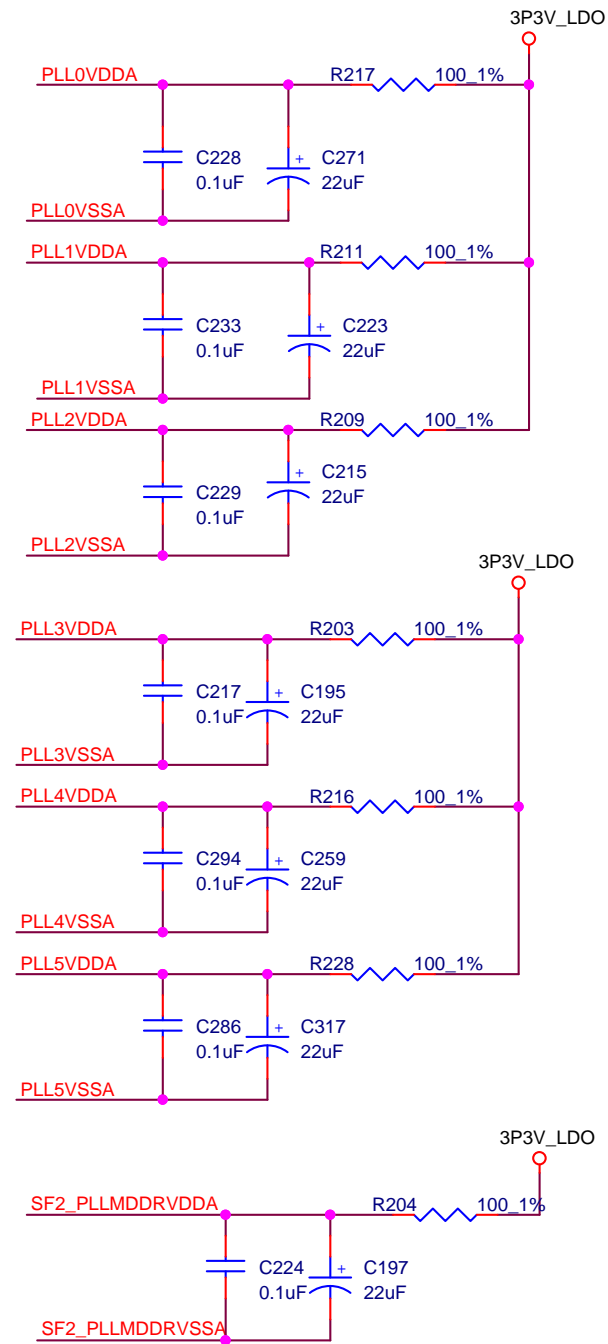
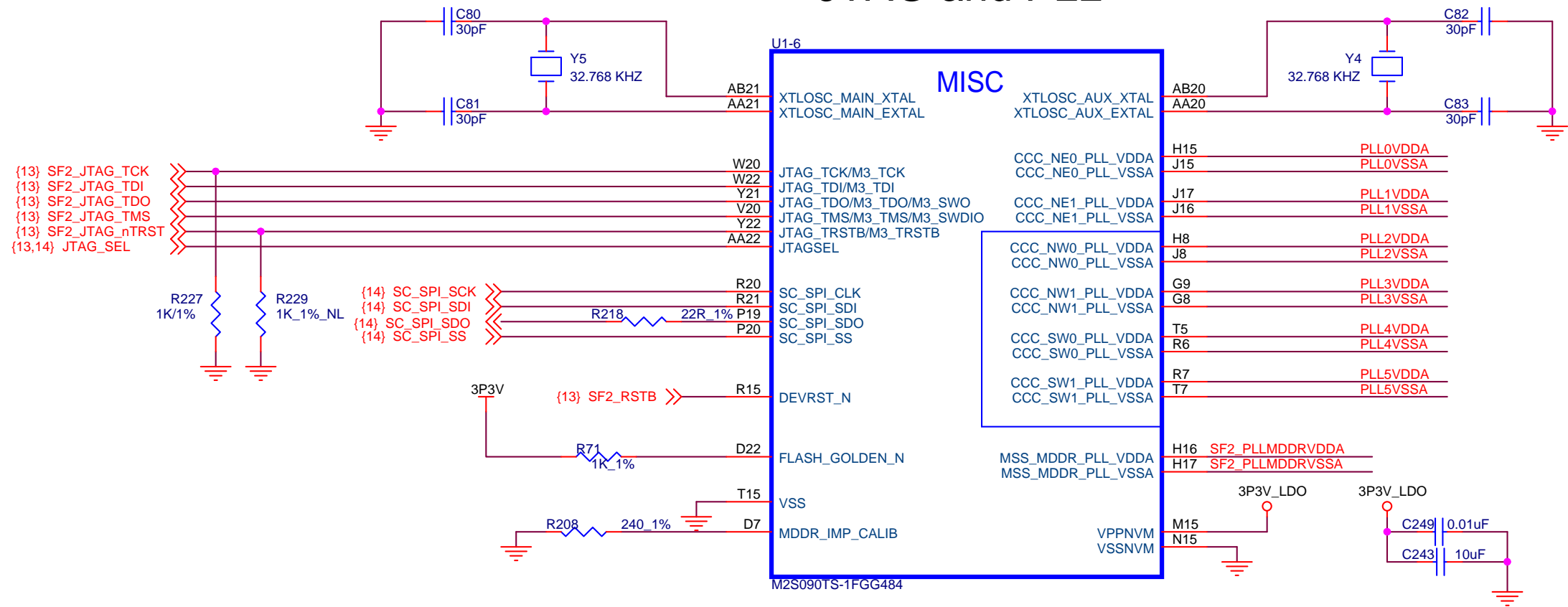


MANUFACTURER P/N = TSW-132-08-T-D-RA  
MANUFACTURER = Samtec

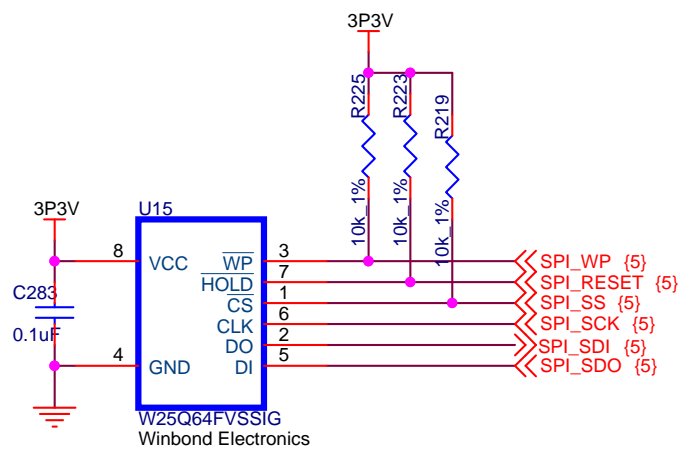
MATING RECEPTACLE P/N: SSW-132-02-S-D-RA  
MANUFACTURER: Samtec

TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 7 OF 22

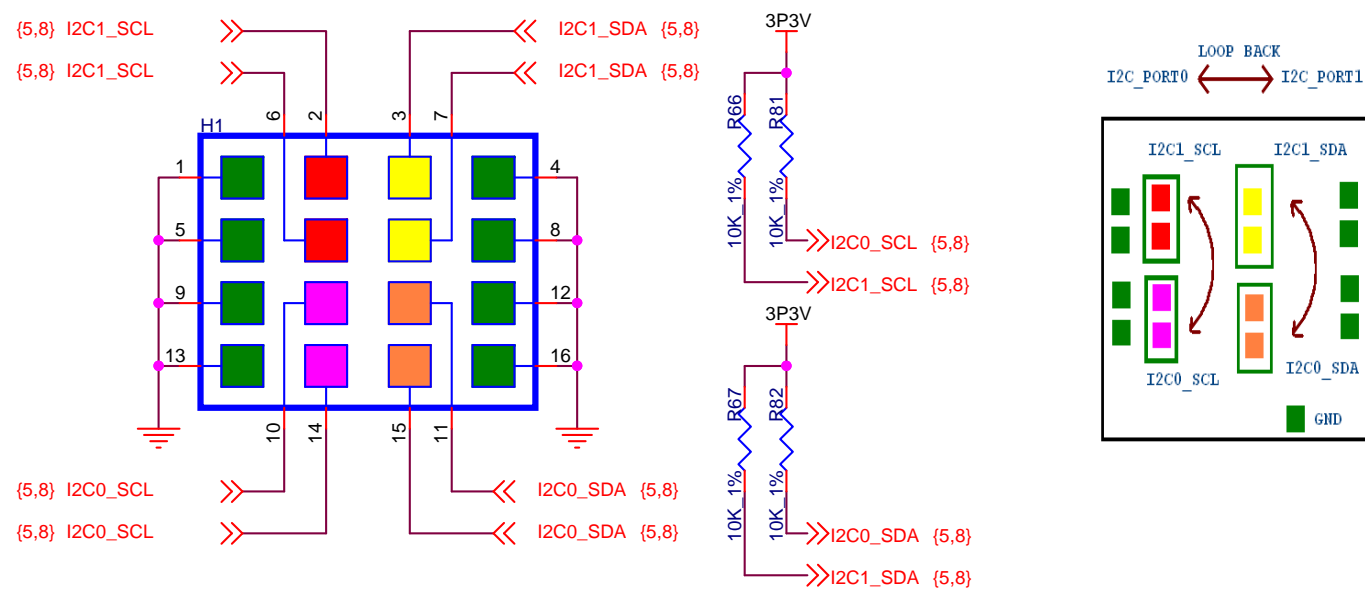
# JTAG and PLL



## SPI FLASH INTERFACE



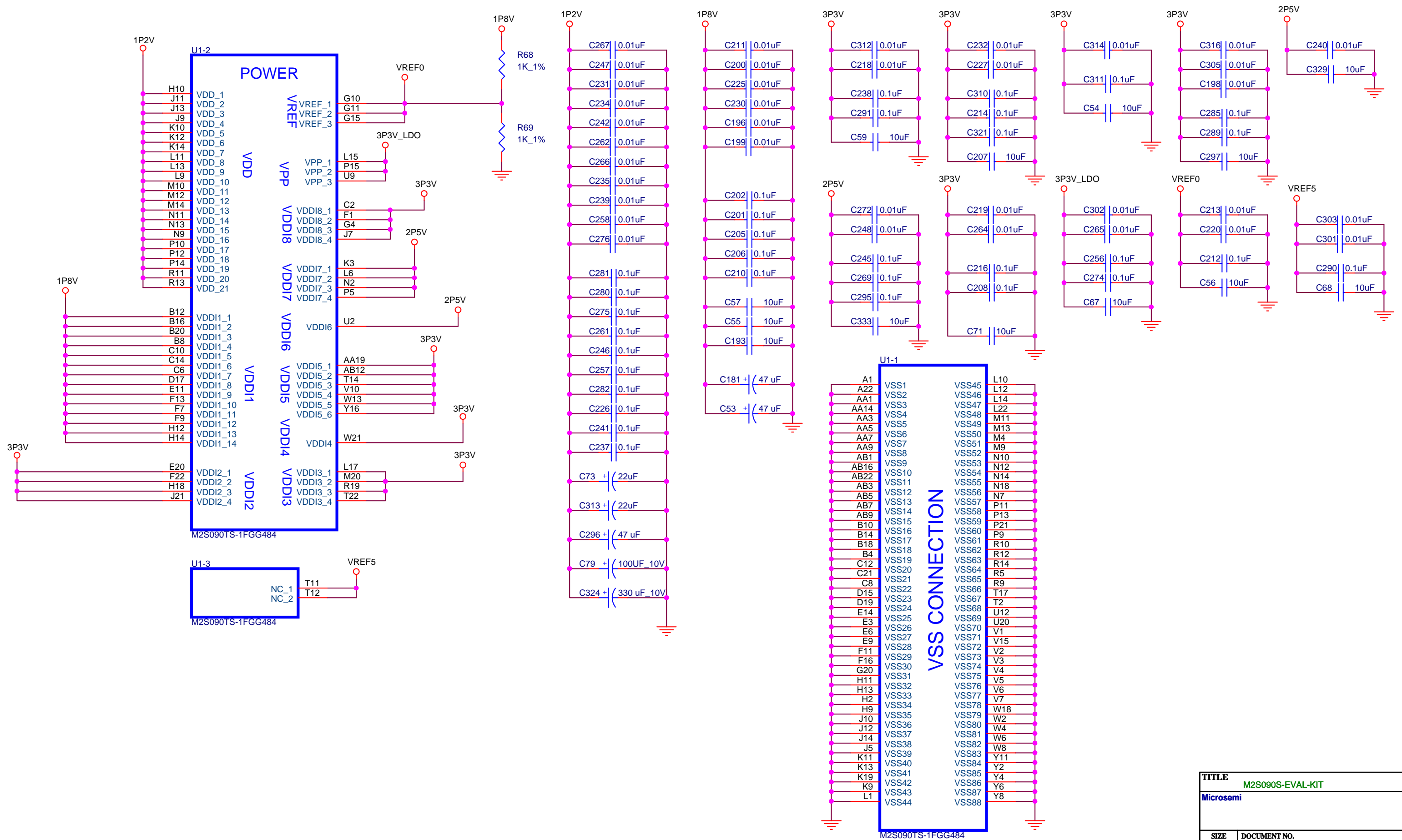
## I2C PORT HEADER



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 8 OF 22



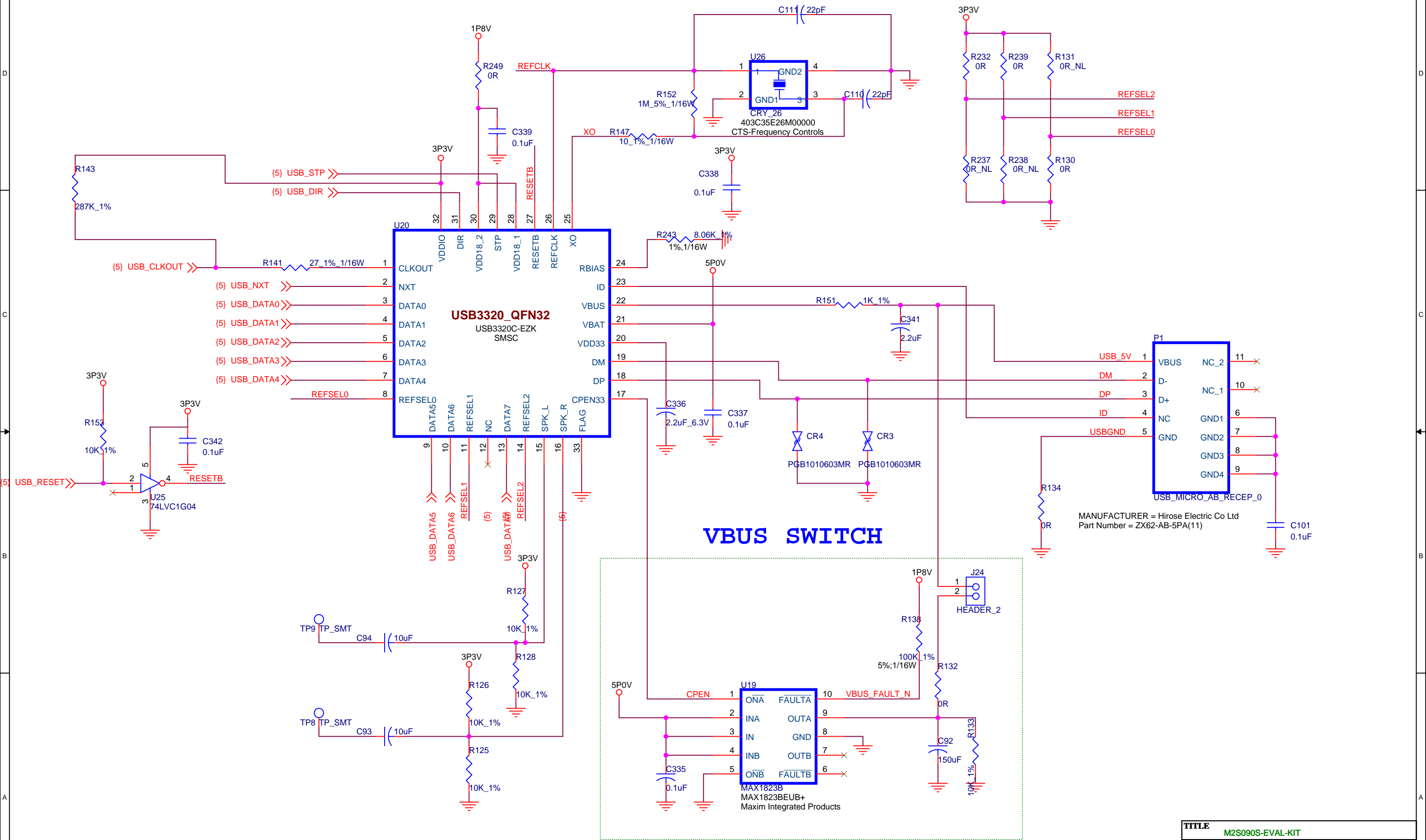
## SF2-POWER, GND AND DECOUPLING CAPACITORS



<b>TITLE</b>			
M2S090S-EVAL-KIT			
Microsemi			
<b>SIZE</b>	<b>DOCUMENT NO.</b>		<b>REV</b>
B			D
<b>DATE:</b>	Friday, June 20, 2014	<b>SH</b>	<b>9 OF 22</b>

# USB Interface

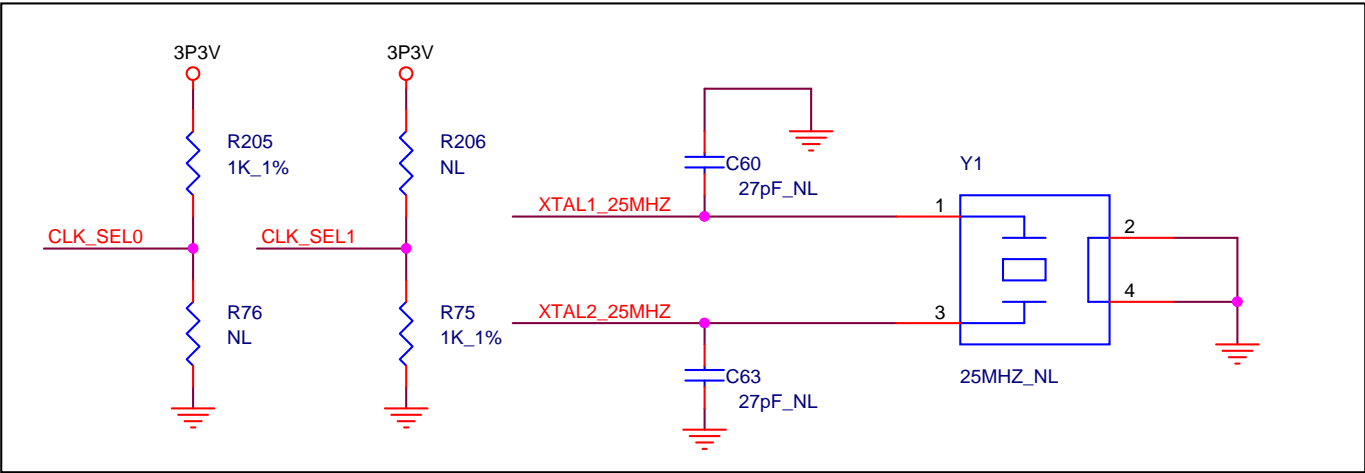
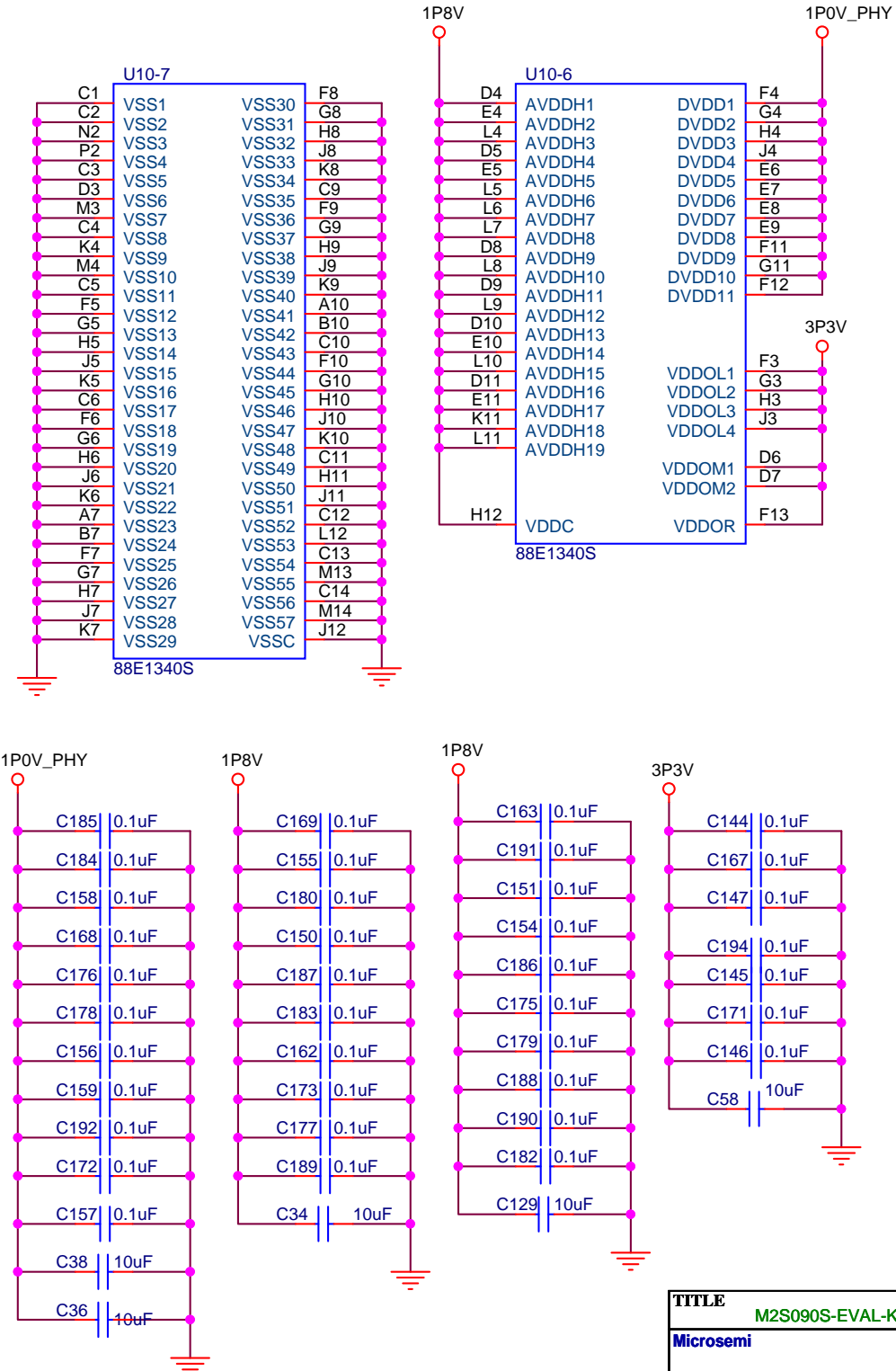
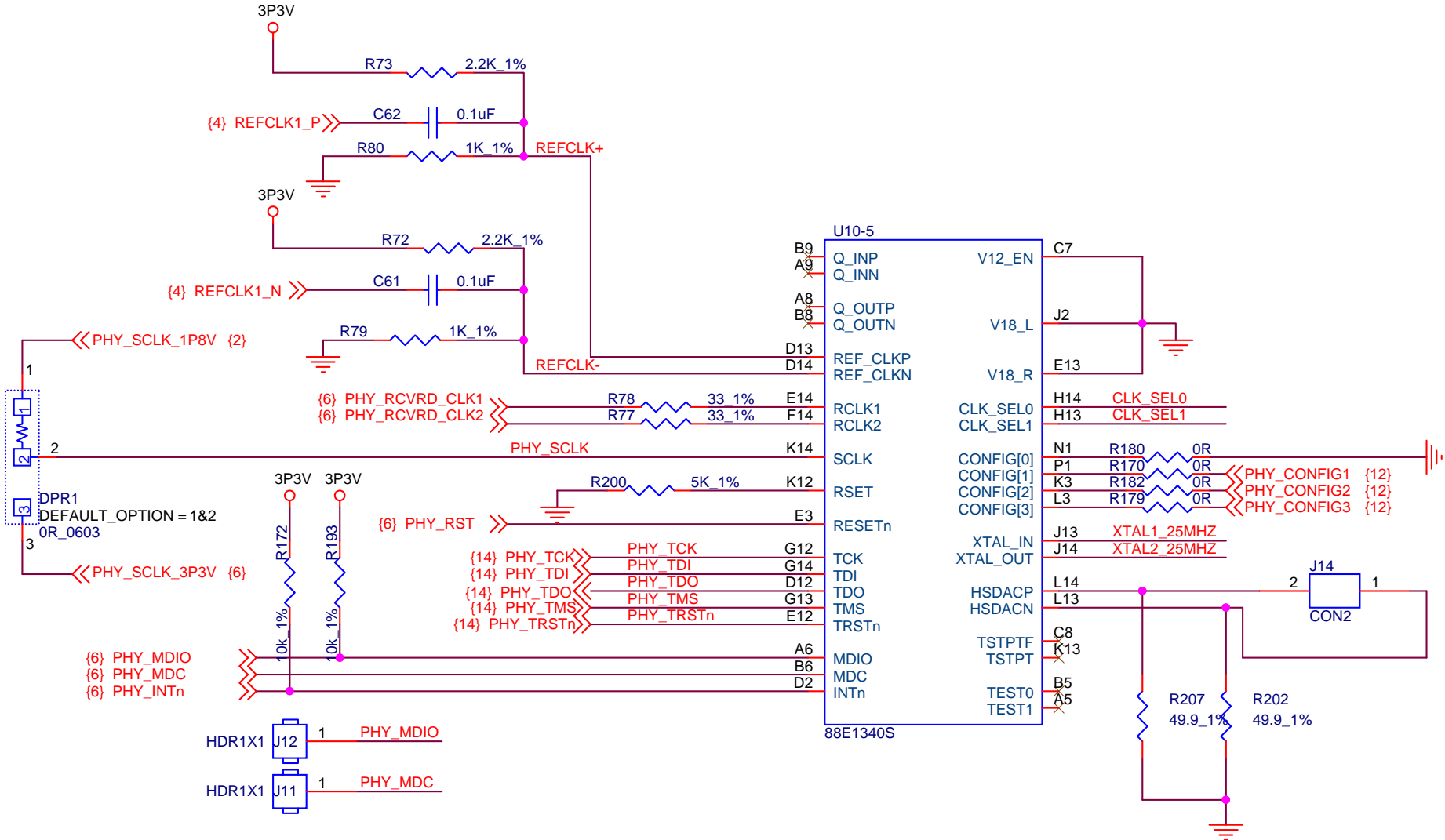
Schematic shows 26.0 MHz Configuration.  
REFCLK[2:0] = 110



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 10 OF 22

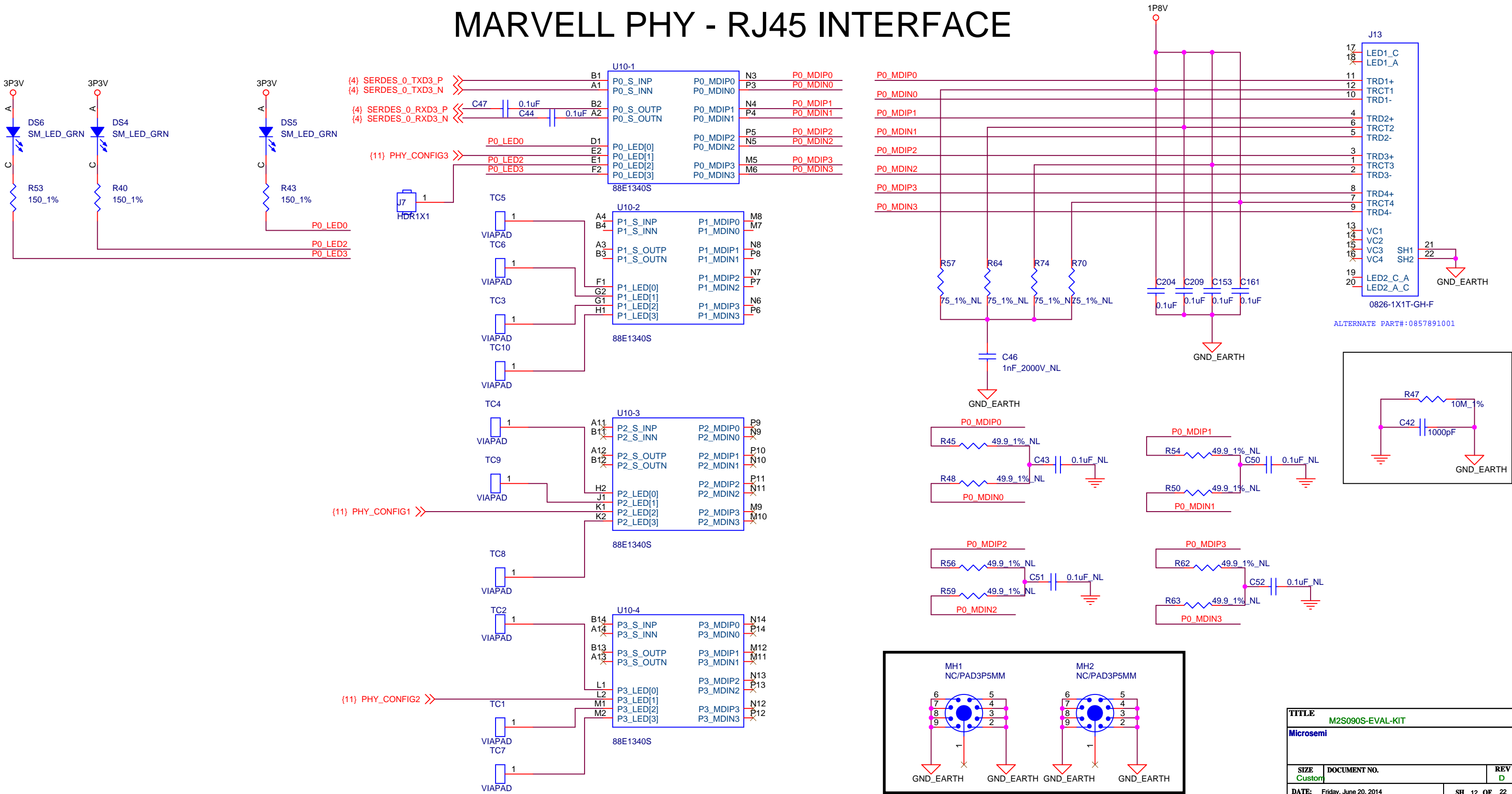
# MARVELL PHY INTERFACE

need to check voltage swing level



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
B		D
DATE:	Friday, June 20, 2014	SH 11 OF 22

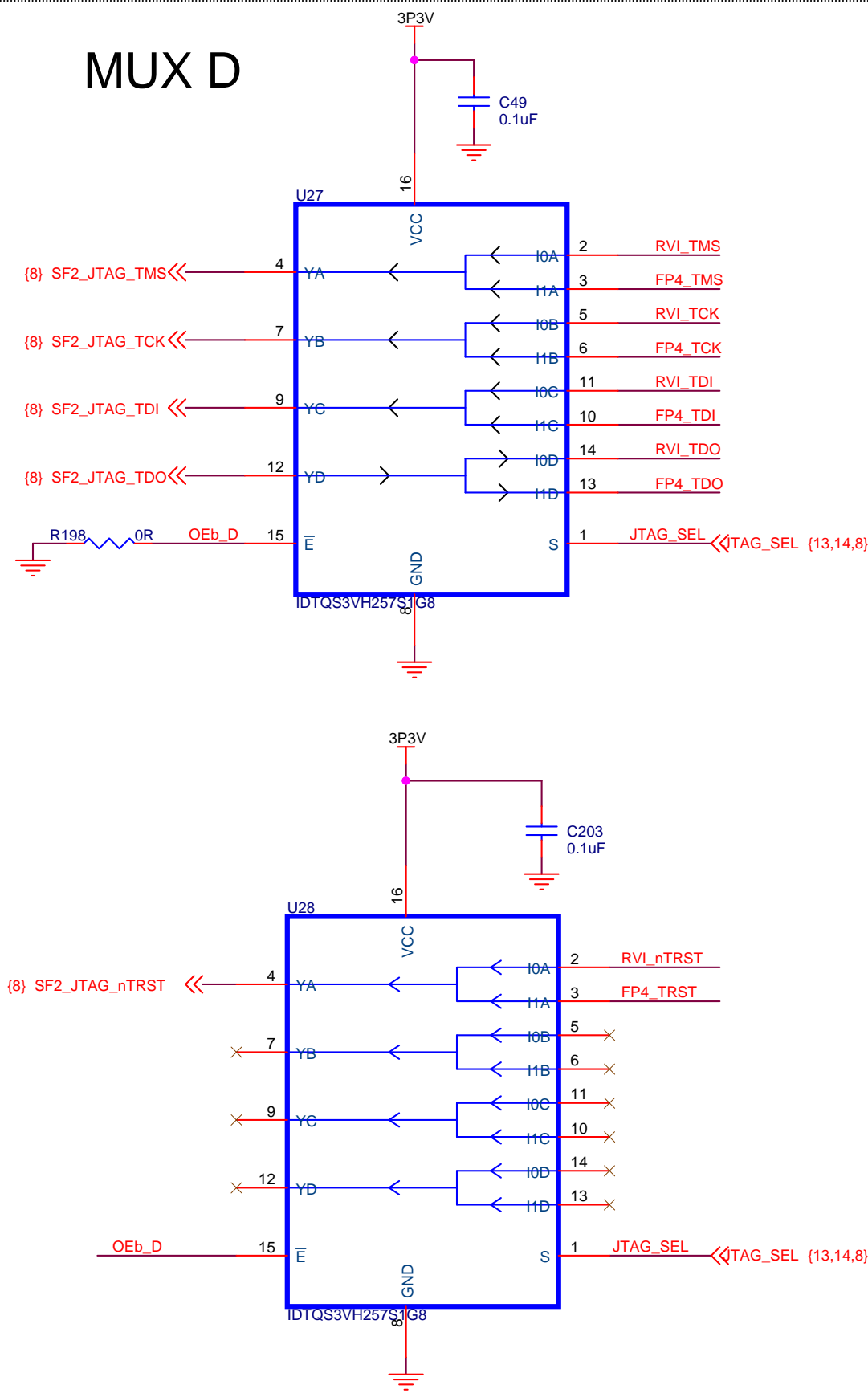
# MARVELL PHY - RJ45 INTERFACE



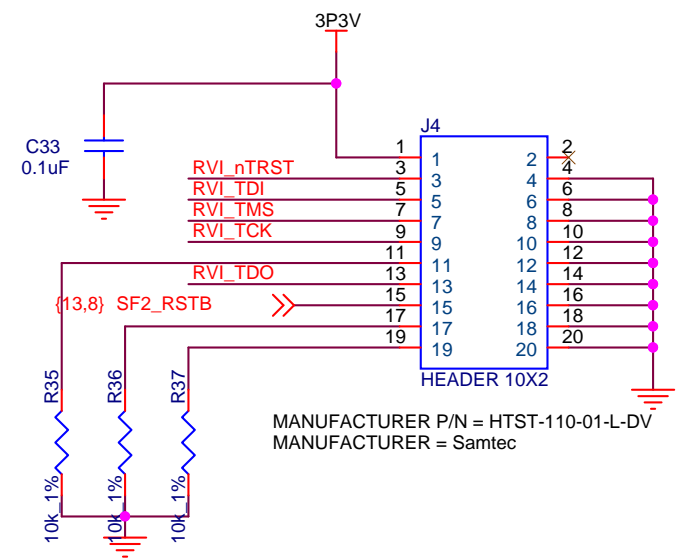
TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE: Friday, June 20, 2014		SH 12 OF 22

# PROGRAMMING CIRCUITRY

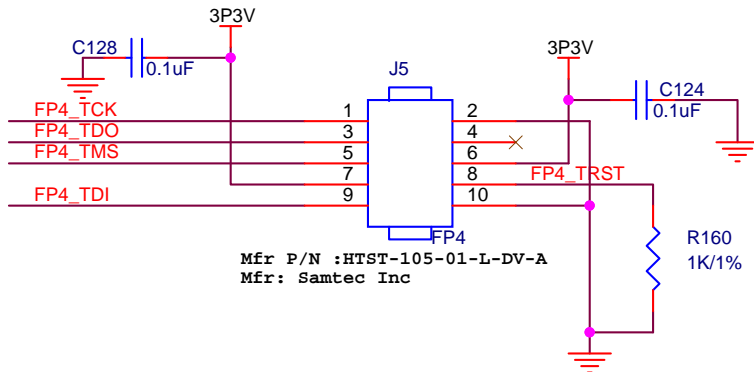
## MUX D



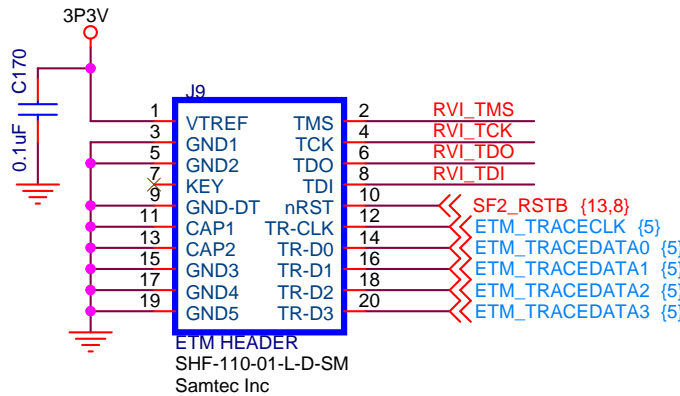
## RVI HEADER



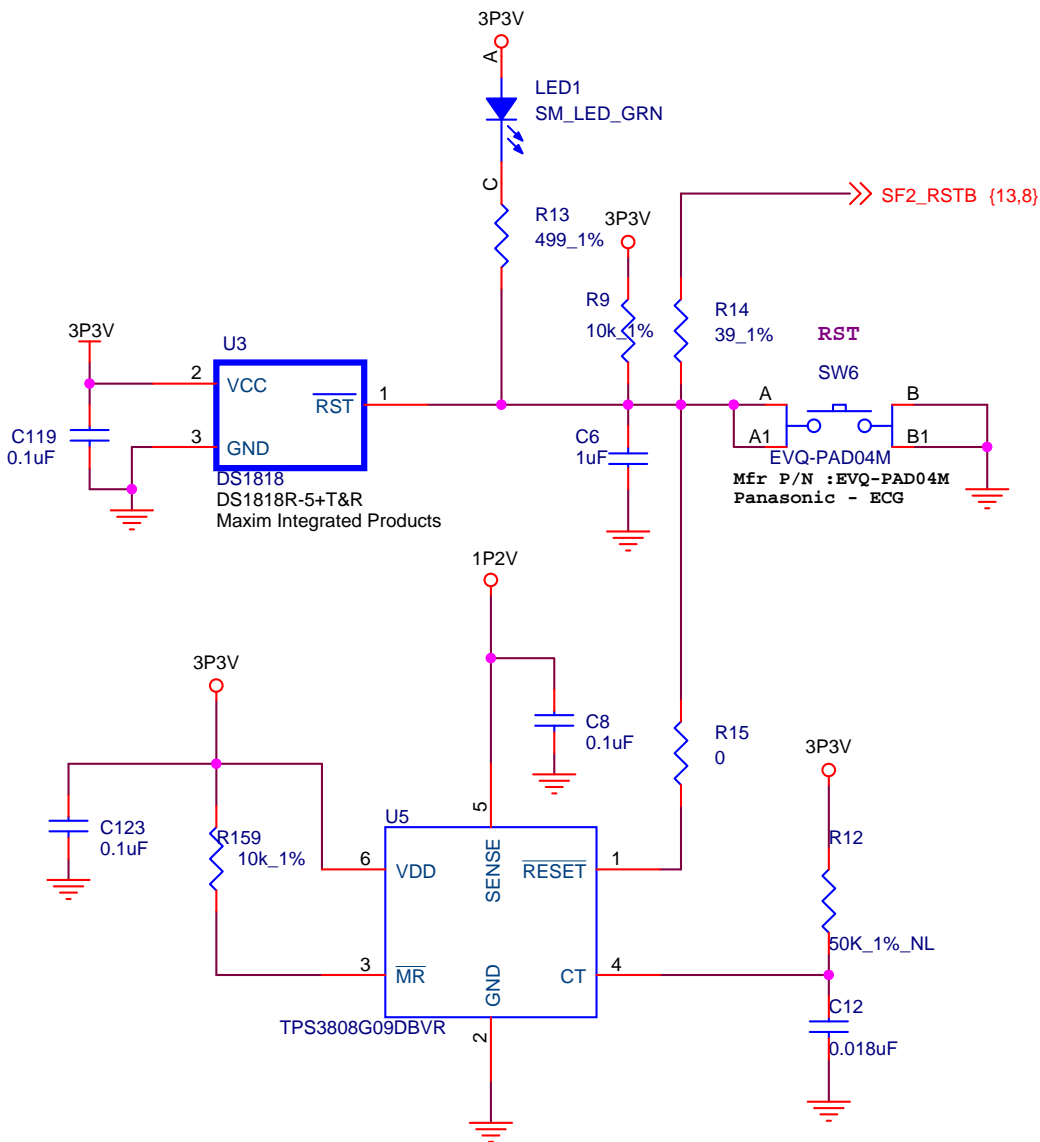
## FP4 HEADER



## TRACE ETM HEADER



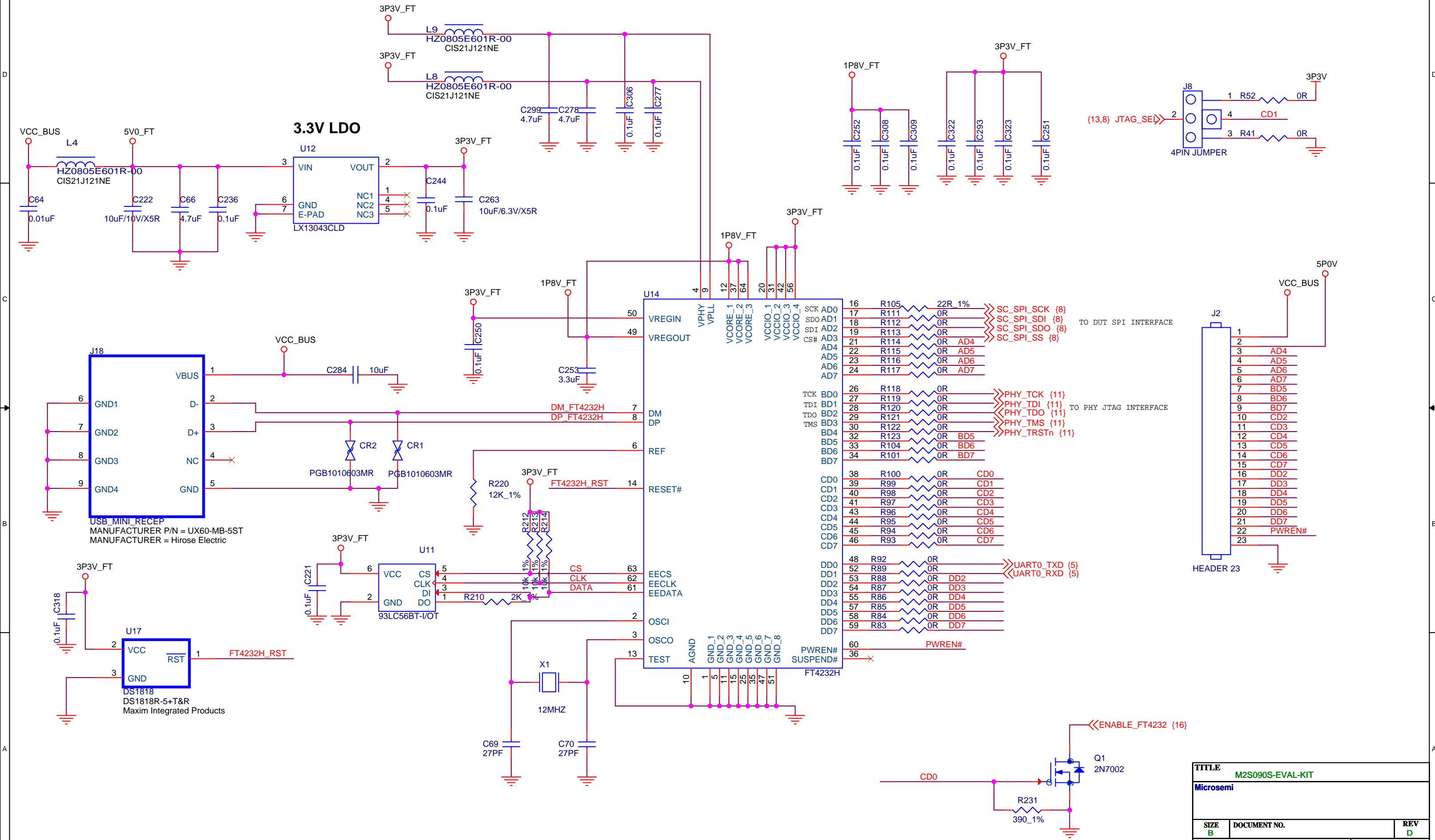
## RESET



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 13 OF 22

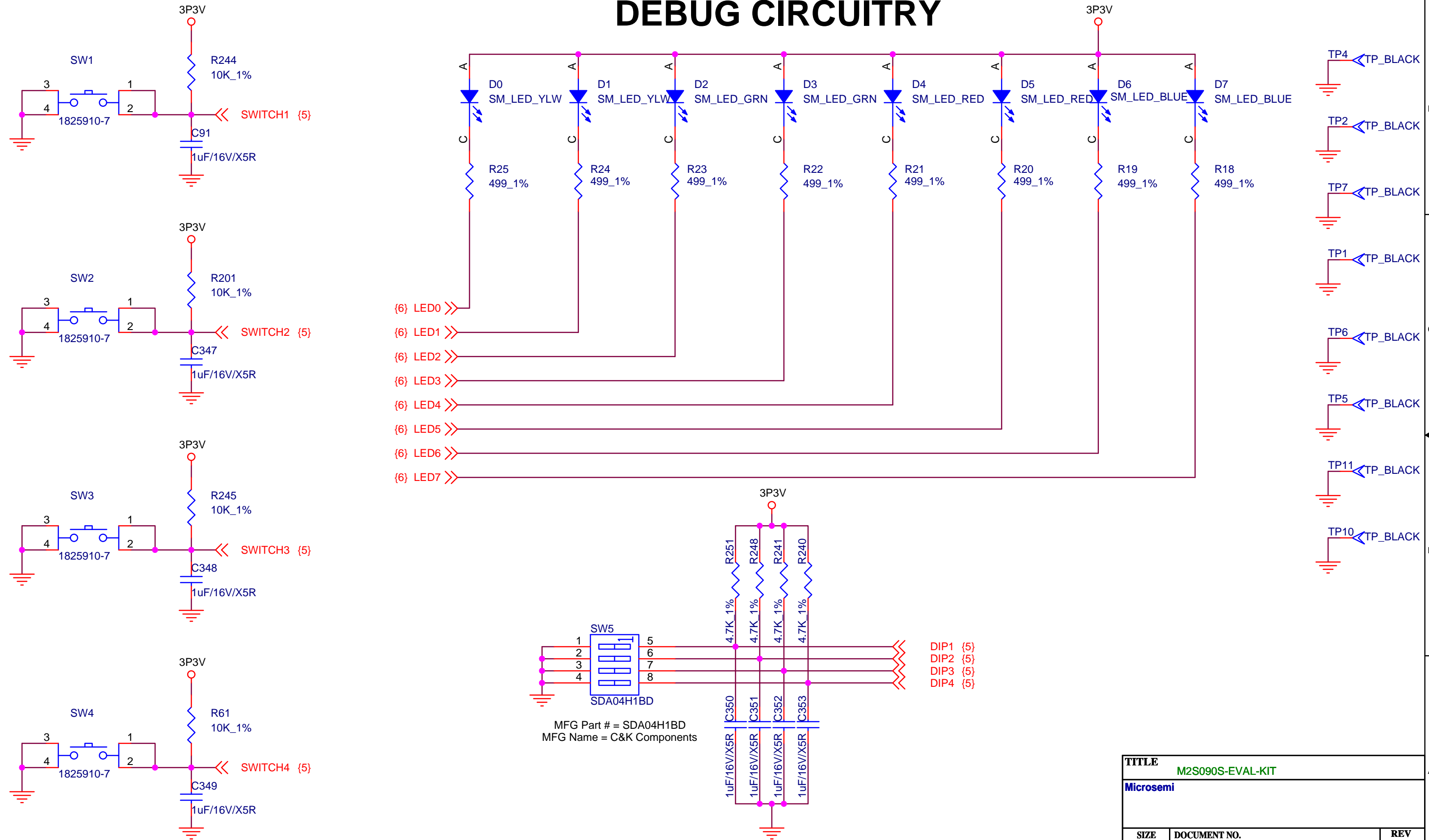


# FT4232H CIRCUITRY



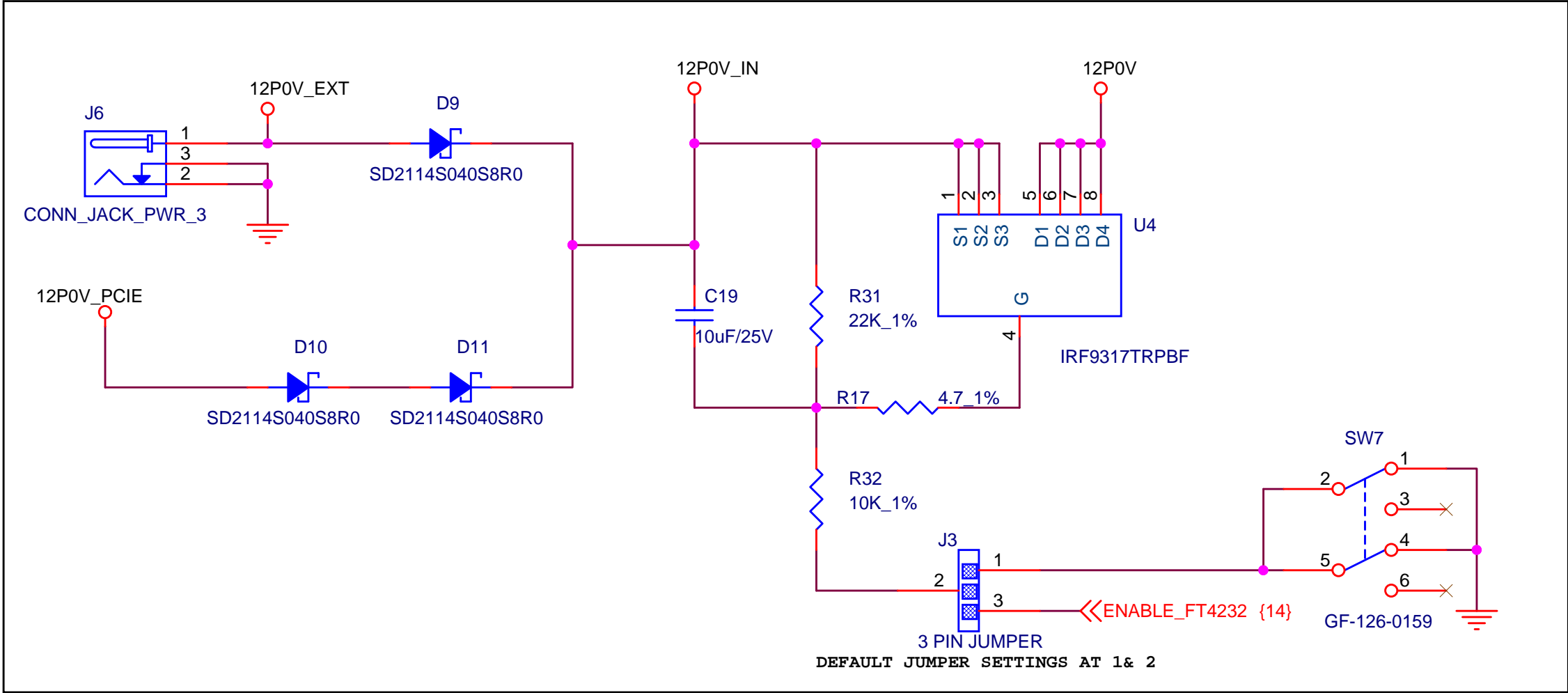
TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
B		D
DATE:	Friday, June 20, 2014	SH 14 OF 22

# DEBUG CIRCUITRY



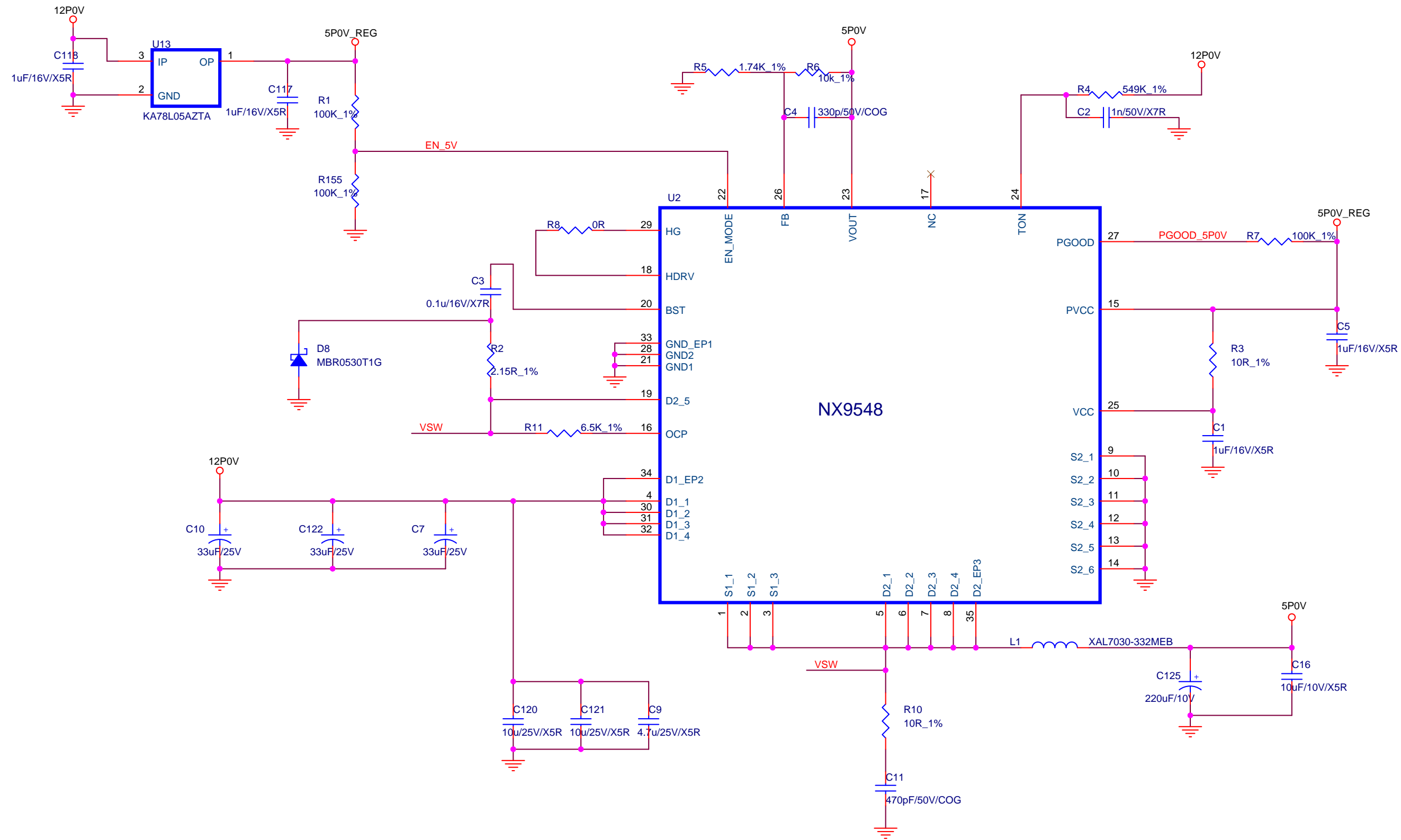
TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:		SH 15 OF 22
Friday, June 20, 2014		

POWER SUPPLY 1



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
A		D
DATE:	Friday, June 20, 2014	SH 16 OF 22

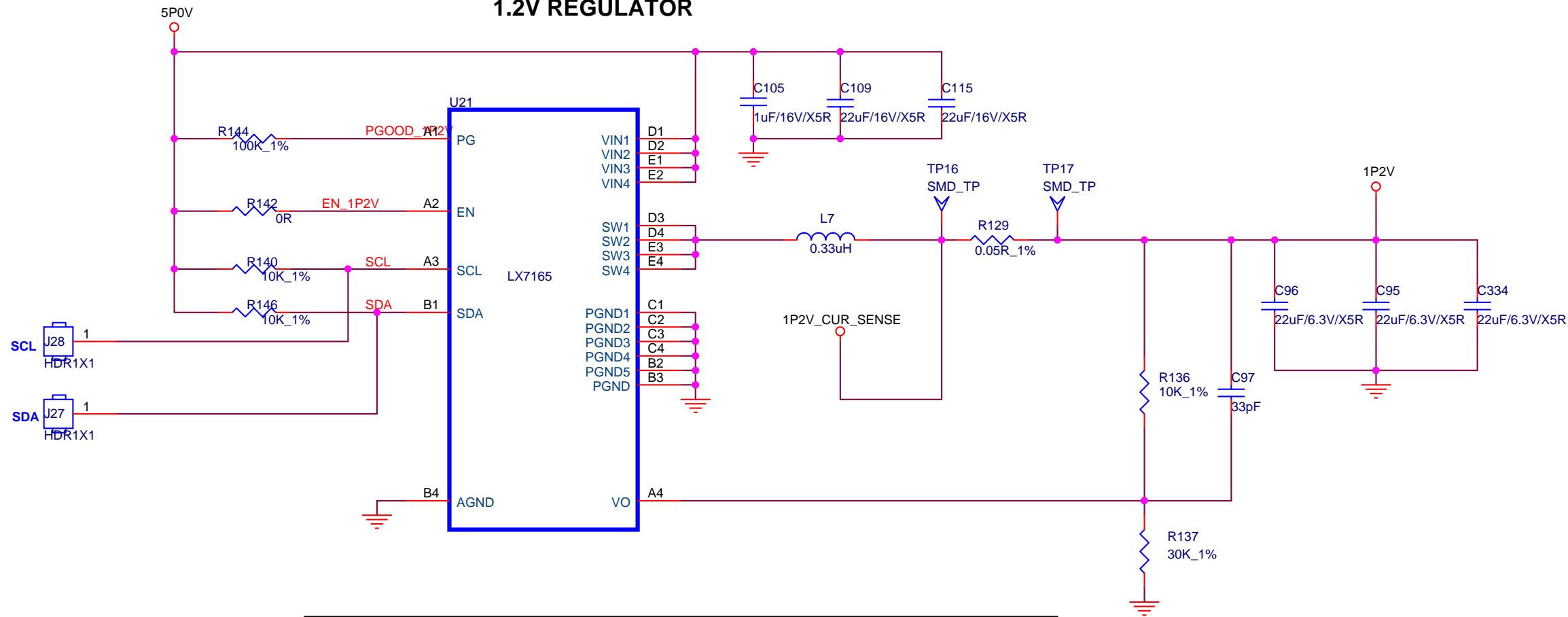
POWER SUPPLY 2



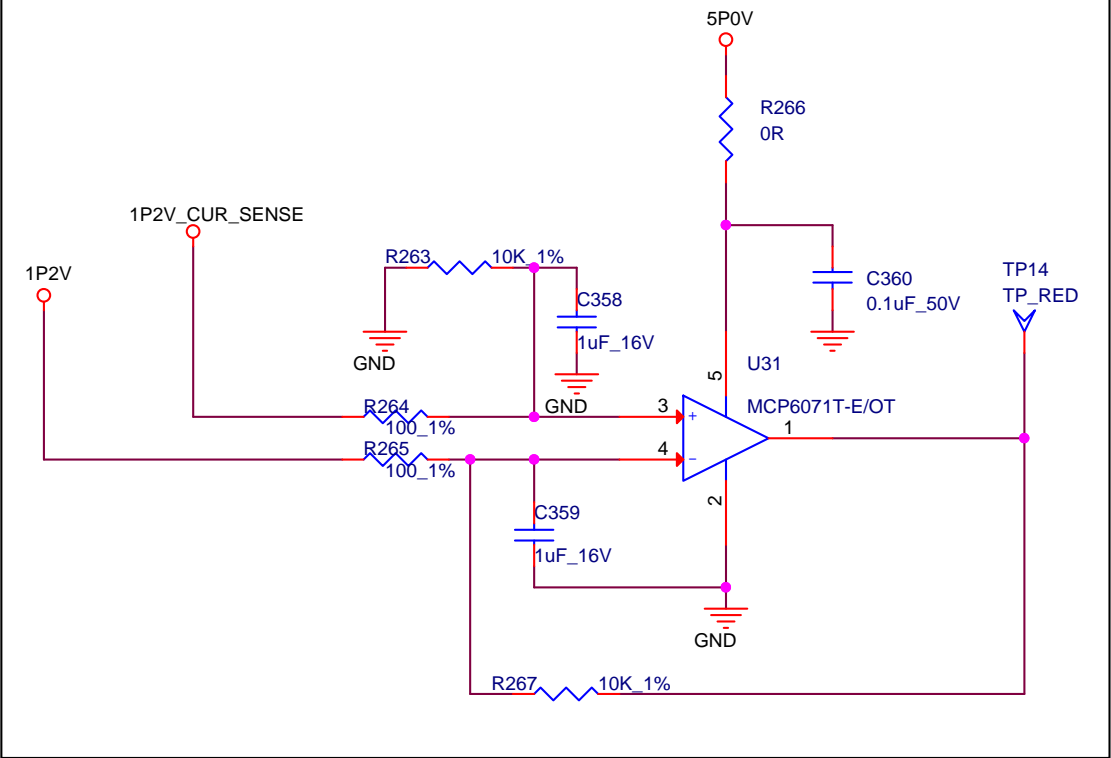
TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
B		D
DATE:	Friday, June 20, 2014	SH 17 OF 22

# POWER SUPPLY 3

## 1.2V REGULATOR



## 1.2V CURRENT SENSING CIRCUIT

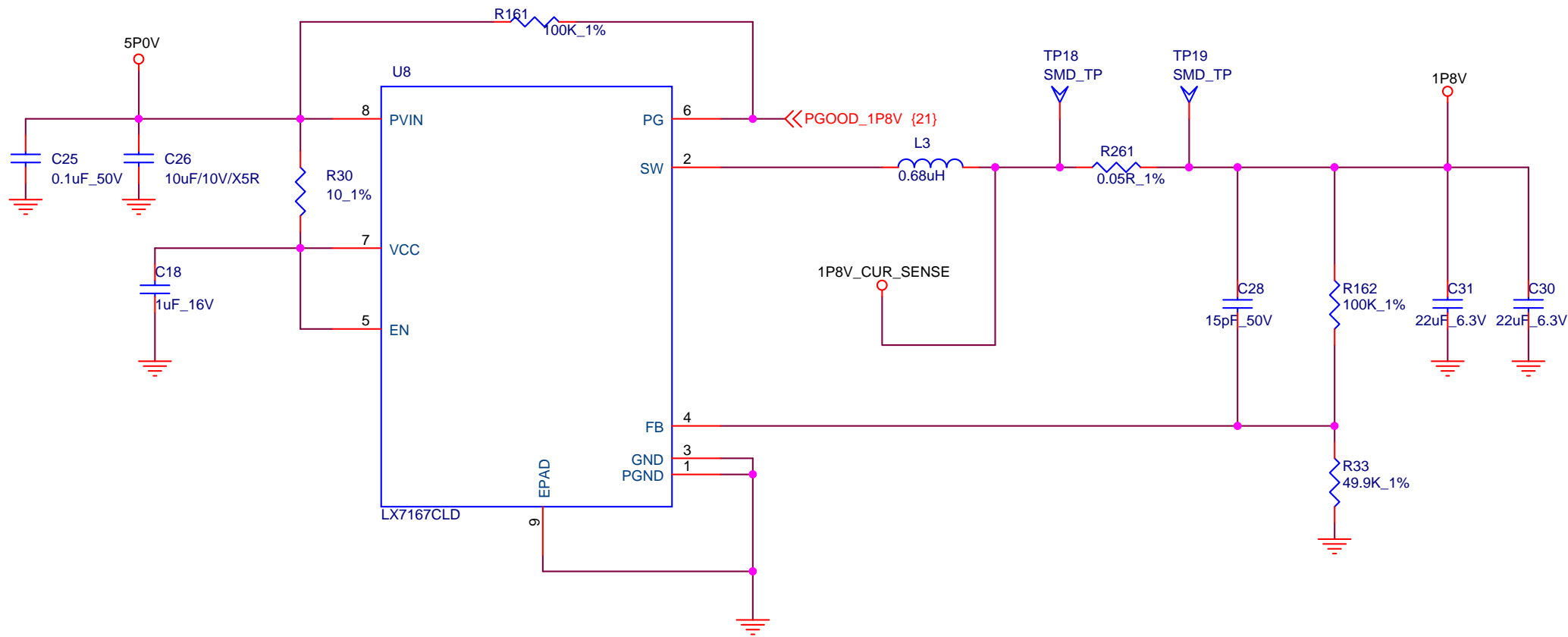


TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
B		D
DATE:	Friday, June 20, 2014	SH 18 OF 22

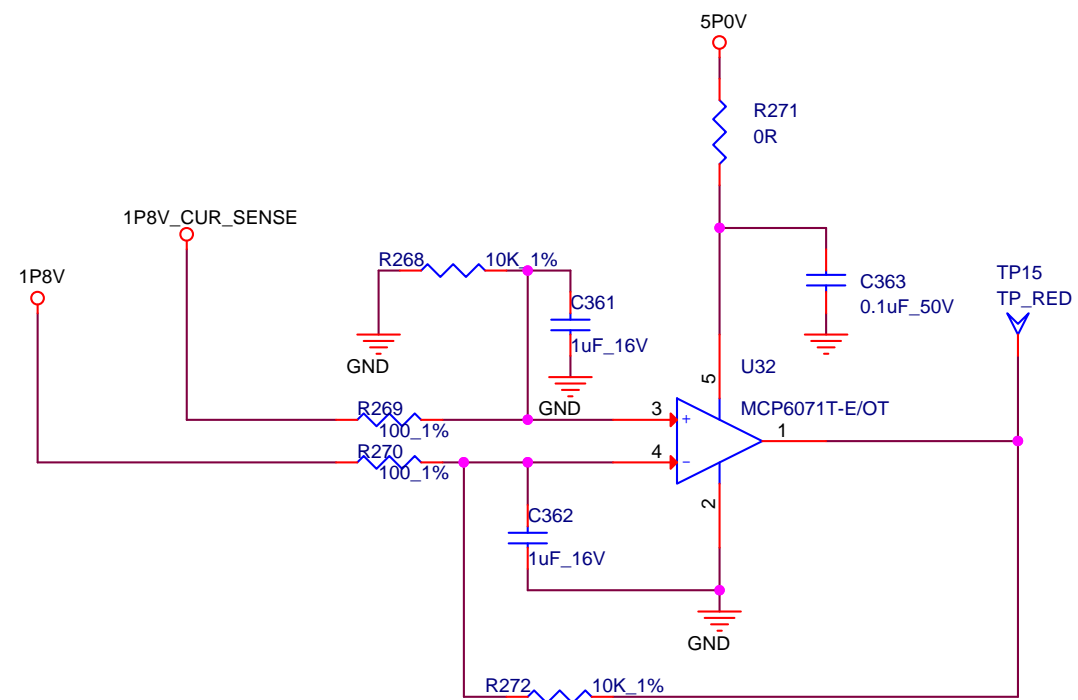


# POWER SUPPLY 4

## 1.8V REGULATOR



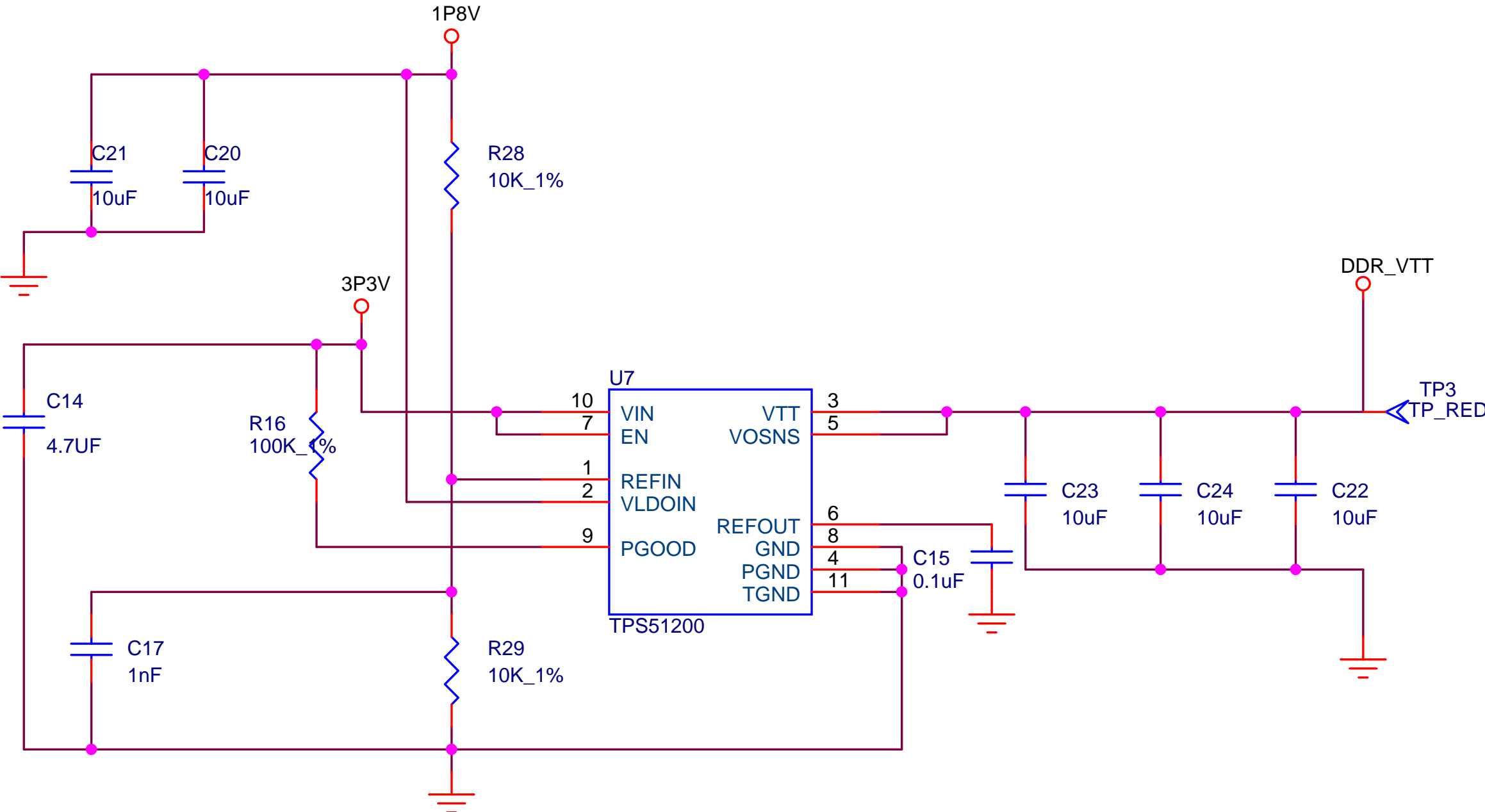
## 1.8V CURRENT SENSING CIRCUIT



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
B		D
DATE:	Friday, June 20, 2014	SH 19 OF 22

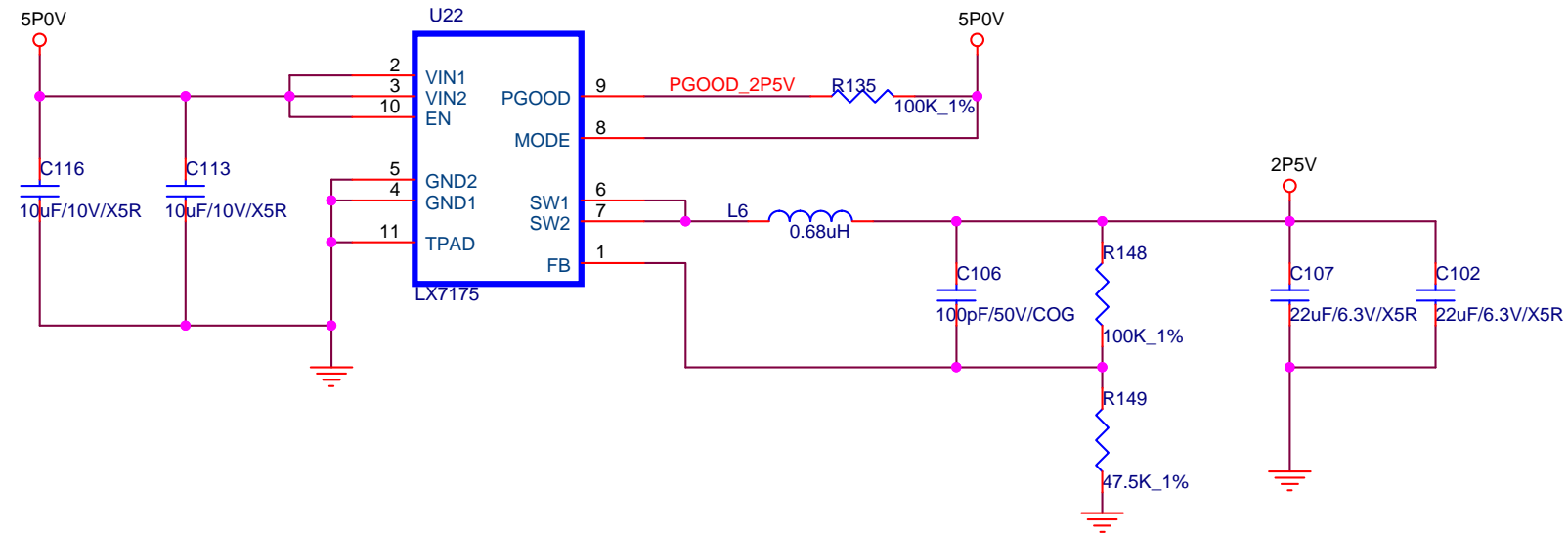
# POWER SUPPLY 5

## 0.9V FOR DDR



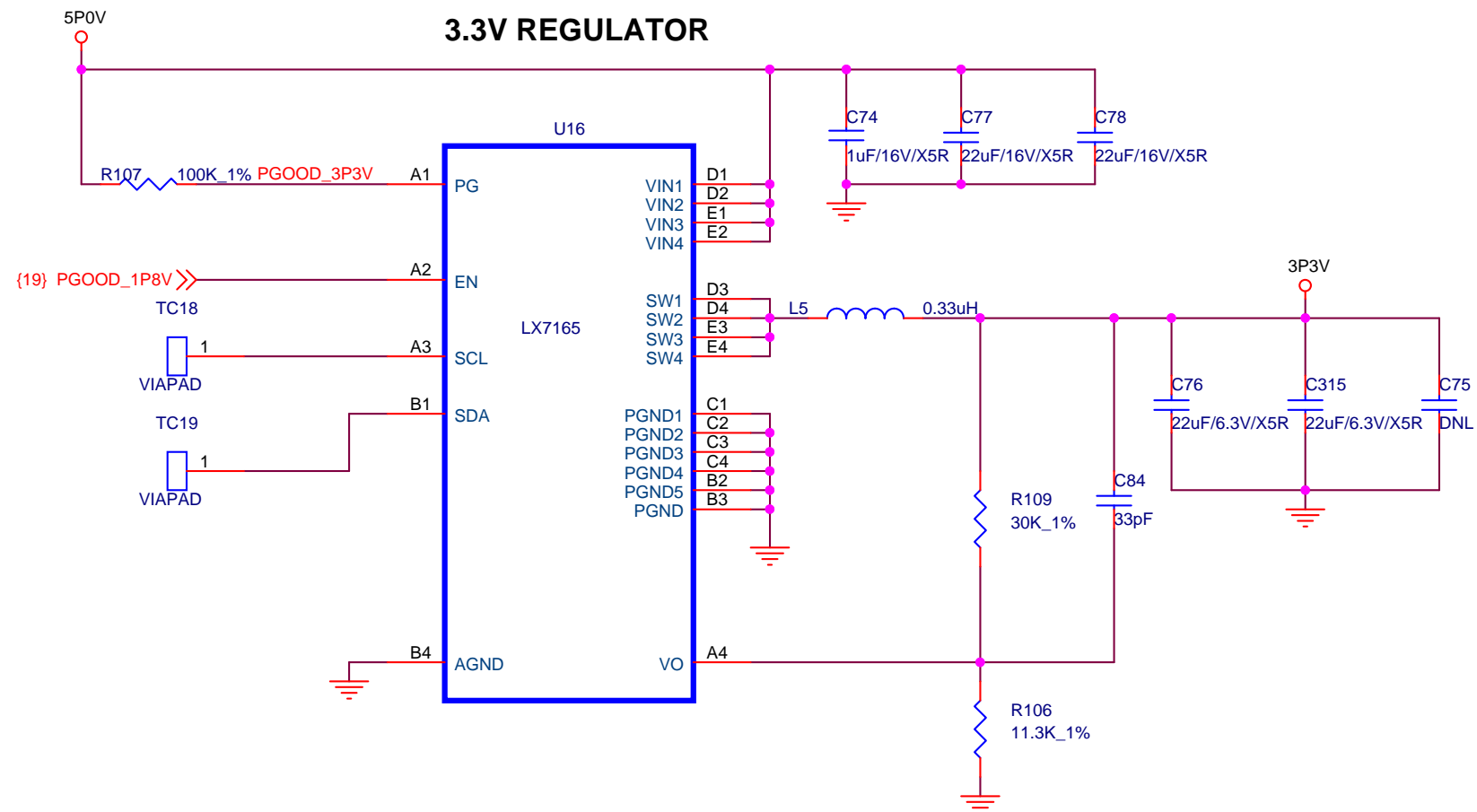
TITLE			M2S090S-EVAL-KIT		
Microsemi					
SIZE	DOCUMENT NO.		REV		
Custom			D		
DATE:	Friday, June 20, 2014		SH	20	OF 22

## 2.5V REGULATOR



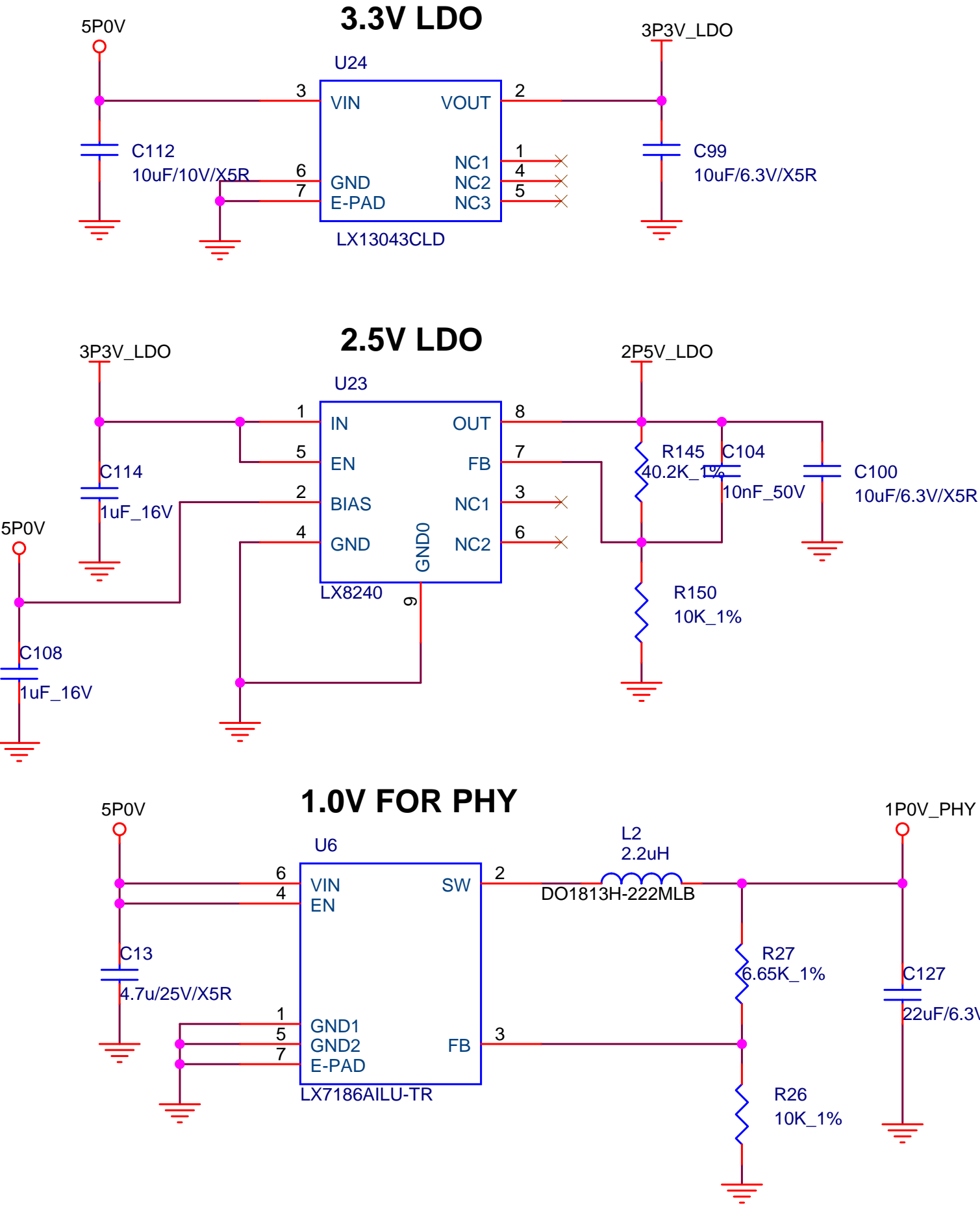
U16

PG	VIN1 VIN2 VIN3 VIN4
EN	SW1 SW2 SW3 SW4
SCL	PGND1 PGND2 PGND3 PGND4 PGND5 PGND
SDA	
AGND	VO



<b>TITLE</b>			
M2S090S-EVAL-KIT			
<b>Microsemi</b>			
<b>SIZE</b>	<b>DOCUMENT NO.</b>		<b>REV</b>
B			D
<b>DATE:</b>	Friday, June 20, 2014	<b>SH</b>	21 <b>OF</b> 22

# POWER SUPPLY 7 & LED



TITLE		
M2S090S-EVAL-KIT		
Microsemi		
SIZE	DOCUMENT NO.	REV
Custom		D
DATE:	Friday, June 20, 2014	SH 22 OF 22