

ARM MPU AM335X Industrial Automation EVM  
Base Board  
ZCZ Package

- See the Hardware User Guide for board details
- See the Hardware Implementation Document for design details
- See the PCB Build Specification for PCB Details



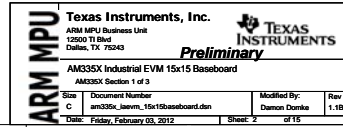
ARM MPU

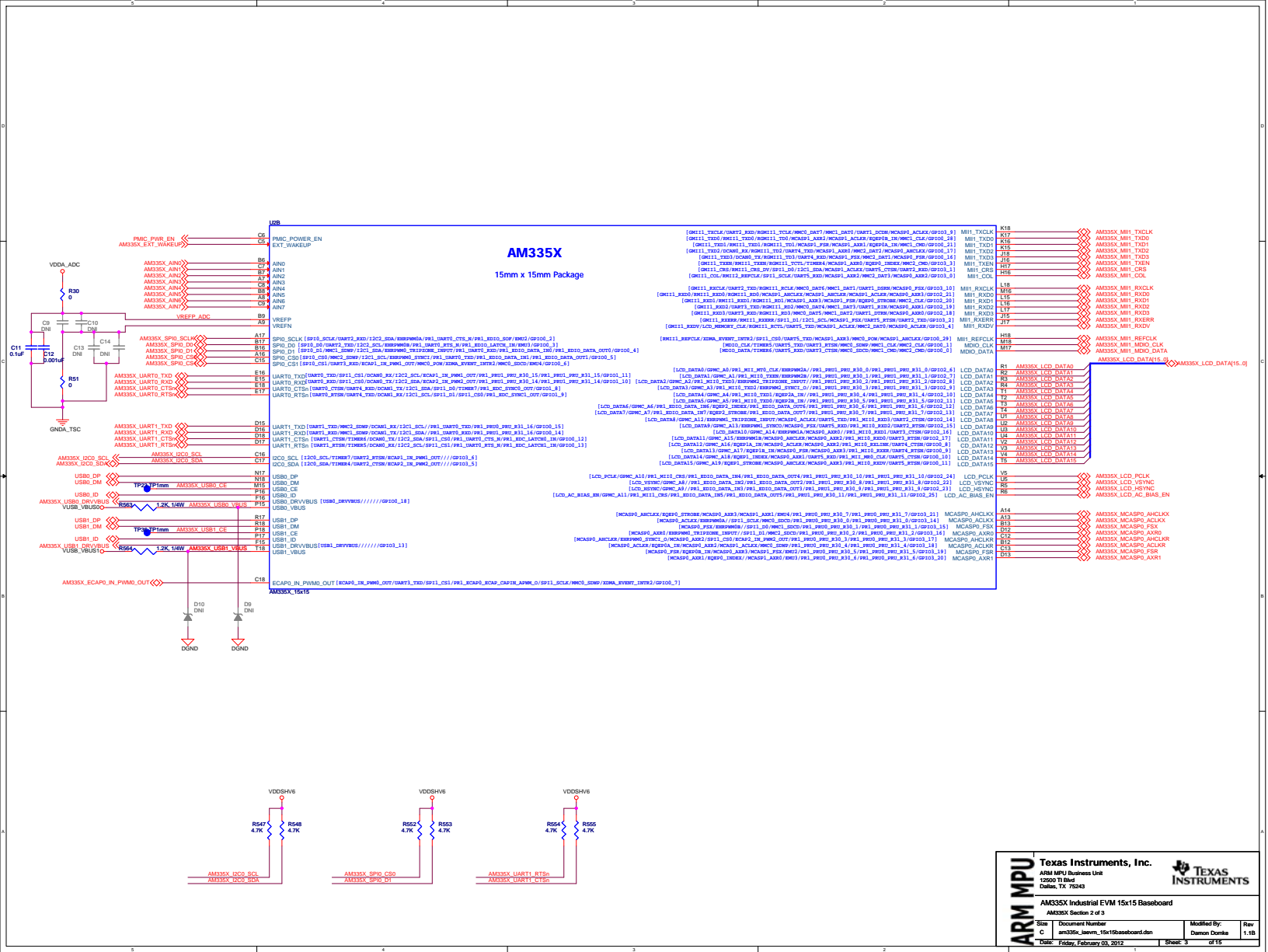
**Texas Instruments, Inc.**  
ARM MPU Business Unit  
12500 TI Blvd  
Dallas, TX 75243

**TEXAS  
INSTRUMENTS**

**AM335X Industrial EVM 15x15 Baseboard**  
*Preliminary*

|                                   |                                                    |
|-----------------------------------|----------------------------------------------------|
| Title Page                        |                                                    |
| Doc<br>O                          | Document Number<br>am335x_iaevm_15x15baseboard.dsn |
| Date<br>Friday, February 03, 2012 | Modified By:<br>Dennis Duvila                      |
| Sheet 1                           | Rev<br>1.1B                                        |





ARM MPU

ARM MPU Business Unit  
125001 T1 Build  
Dallas, TX 75243

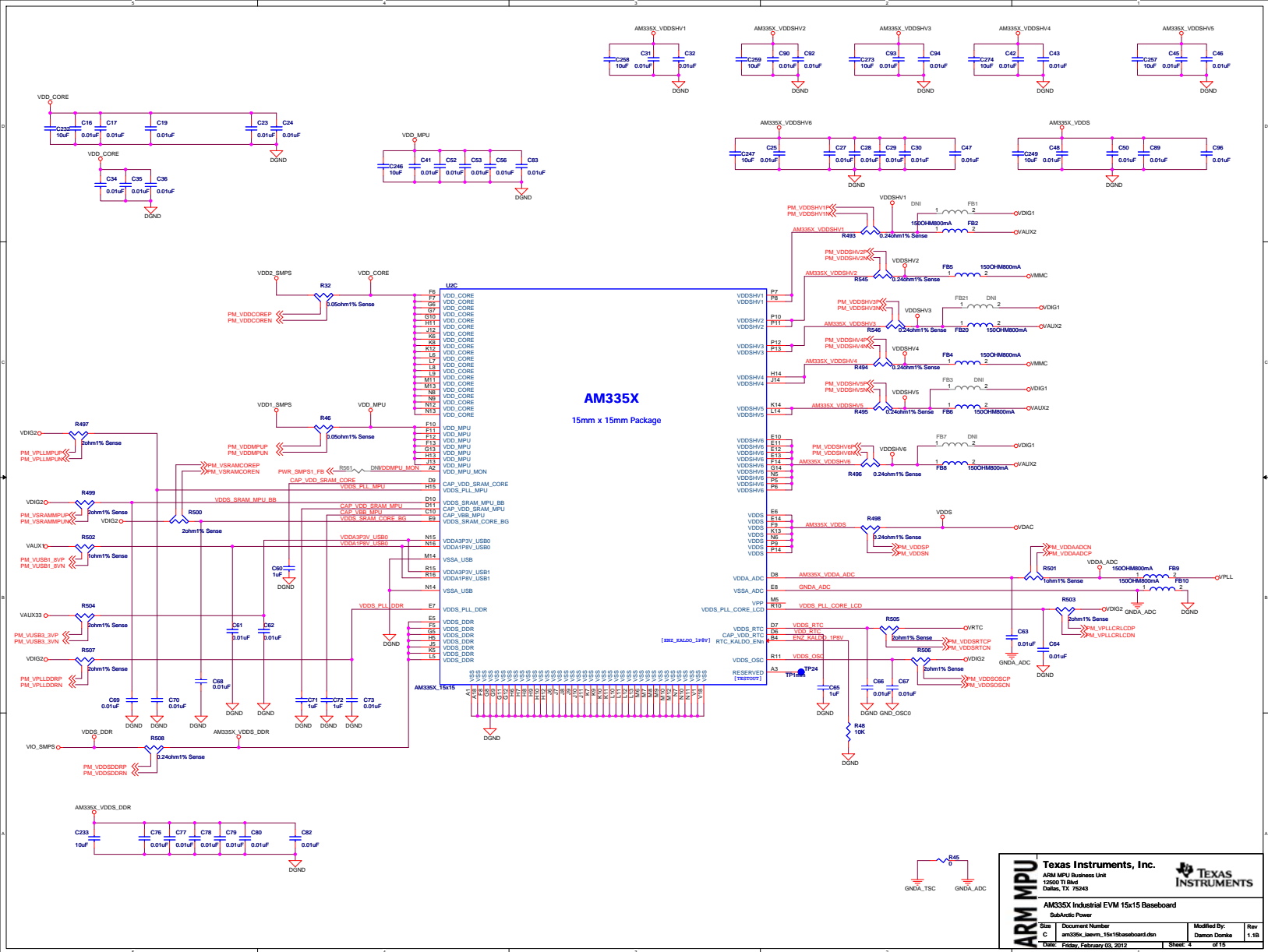
Texas Instruments, Inc.

TEXAS  
INSTRUMENTS

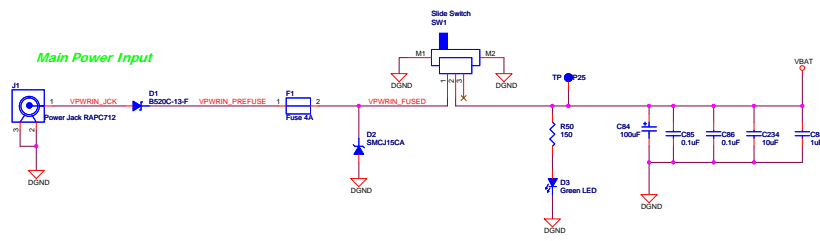
AM335X Section 2 of 3

Doc. O  
am335x\_industrial\_15x15baseboard.dsn  
Date: Friday, February 03, 2012

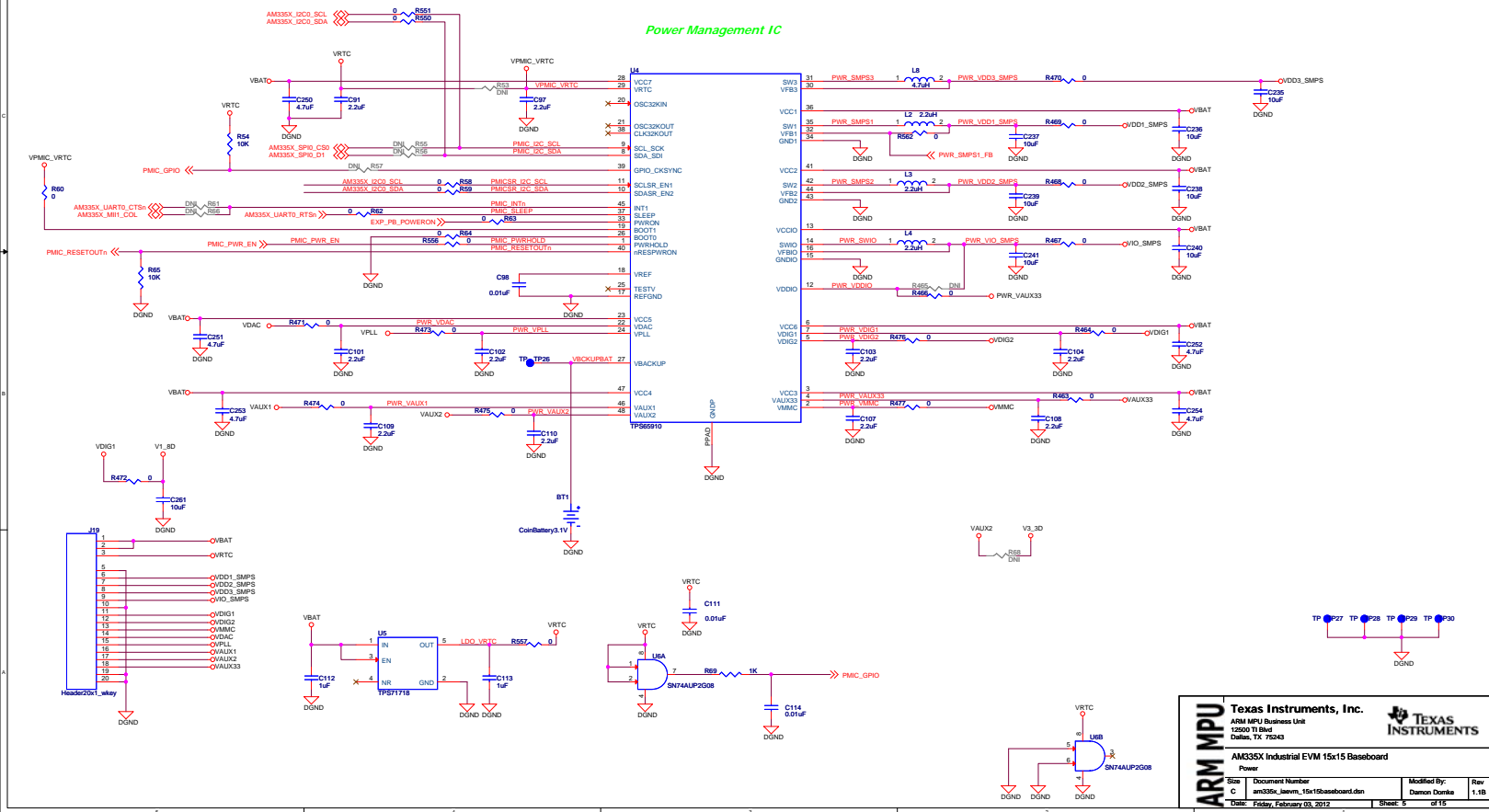
Modified By:  
Dennis Duvick  
Rev 1.18



# Main Power Input



# Power Management IC



|                                              |                                                   |                                                                                              |             |
|----------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------|-------------|
| <b>ARM MPU</b>                               |                                                   | <b>Texas Instruments, Inc.</b><br>ARM MPU Business Unit<br>12500 TI Blvd<br>Dallas, TX 75243 |             |
| <b>AM335X Industrial EVM 15x15 Baseboard</b> |                                                   |                                                                                              |             |
| Power                                        |                                                   |                                                                                              |             |
| Sns<br>O                                     | Document Number<br>am335x-evm_15x15-baseboard.dsn | Modified By:<br>Dennis Donike                                                                | Rev<br>1.1B |
| Date: Friday, February 03, 2012              |                                                   | Sheet 5 of 15                                                                                |             |

### ID Memory

The diagram illustrates the ID Memory circuit. It features an AM335X, DCA, SCL, AM335X, QCS, SD interface connected to a CAT24C256W EEPROM. The EEPROM is powered by VDDSHV6 and grounded at VSS. A 0.01uF capacitor (C116) is connected between VDDSHV6 and VSS. A 10K resistor (R72) is connected between VDDSHV6 and ground.

**JTAG Connector**

VDDSHV6

R71 4.7K

JTAG\_TMS

JTAG\_TCK

JTAG\_TDO

JTAG\_TCK

JTAG\_TMS

R81 100

AM335X\_XDMA\_EVENT\_INTn1

AM335X\_SDP\_CSI1

C260 0.1uF

DND

VDDSHV6

C115 0.01uF

DND

J2

1 TMS

2 TRSTn

3 TCK

4 TDO

5 TCK

6 TDO

7 TCK

8 TDO

9 TCK

10 TDO

11 TCK

12 TDO

13 TCK

14 TDO

15 TCK

16 TDO

17 TCK

18 TDO

19 TCK

20 TDO

C11 JTAG

R70 4.7K

DND

R73

DND

R77

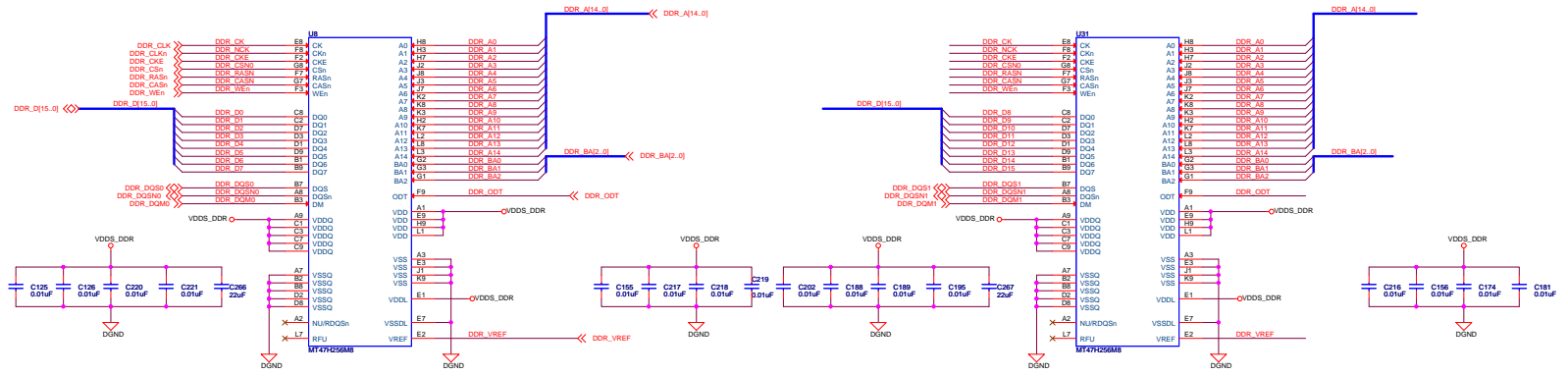
DND

### User Reset/Interrupt Switches

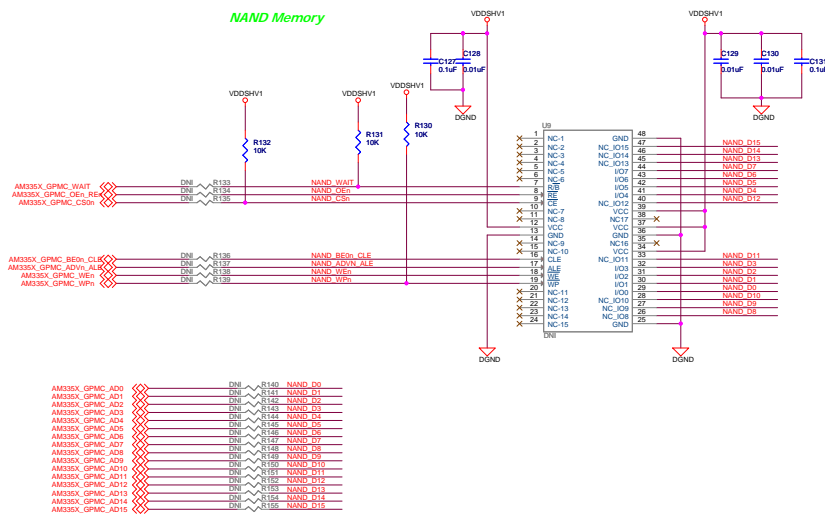
The top diagram illustrates a reset switch circuit. A switch labeled SW2 is connected to a B35SL switch. The B35SL switch is connected to a pull-up resistor R117 (10k) to SYS\_WARMRESETn and a pull-down resistor R118 (10k) to GND. The output is labeled SYS\_WARMRESETn.

The bottom diagram illustrates an interrupt switch circuit. A switch labeled SW5 is connected to a B35SL switch. The B35SL switch is connected to a pull-up resistor R559 (10k) to VDDSHV6 and a pull-down resistor R560 (10k) to GND. The output is labeled PB\_INTERRUPT1, which is connected to a pull-up resistor R113 (10k) to AM335x\_EXTINTn and a pull-down resistor R112 (10k) to GND.

# DDR2 SDRAM

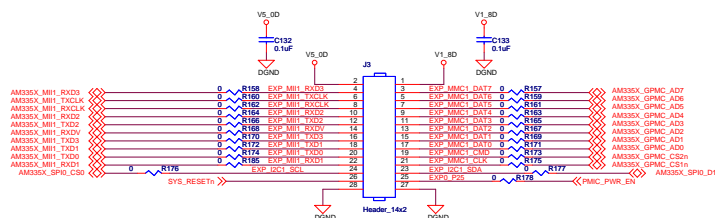


# NAND Memory

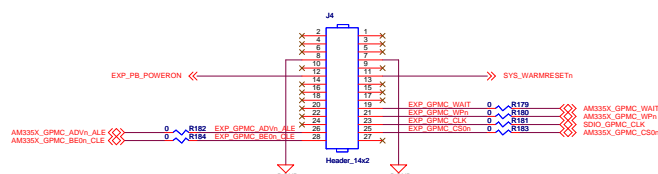


|                                              |                                                  |                                                                                              |             |  |  |
|----------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------|-------------|--|--|
| <b>ARM MPU</b>                               |                                                  | <b>Texas Instruments, Inc.</b><br>ARM MPU Business Unit<br>12500 TI Blvd<br>Dallas, TX 75243 |             |  |  |
| <b>AM335X Industrial EVM 15x15 Baseboard</b> |                                                  |                                                                                              |             |  |  |
| Memory                                       |                                                  |                                                                                              |             |  |  |
| Sns<br>O                                     | Document Number<br>am335x-evm_15x15-baseboard.dn | Modified By:<br>Dennis Duvick                                                                | Rev<br>1.1B |  |  |
| Date: Friday, February 03, 2012              |                                                  | Sheet 7 of 15                                                                                |             |  |  |

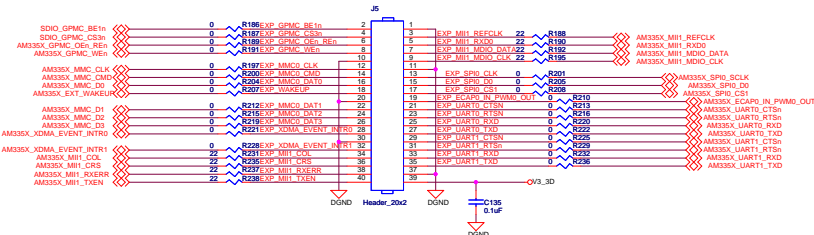
### Expansion Connector - EXP0



### Expansion Connector - EXP1



### Expansion Connector - EXP2



### Expansion Connector - EXP3

