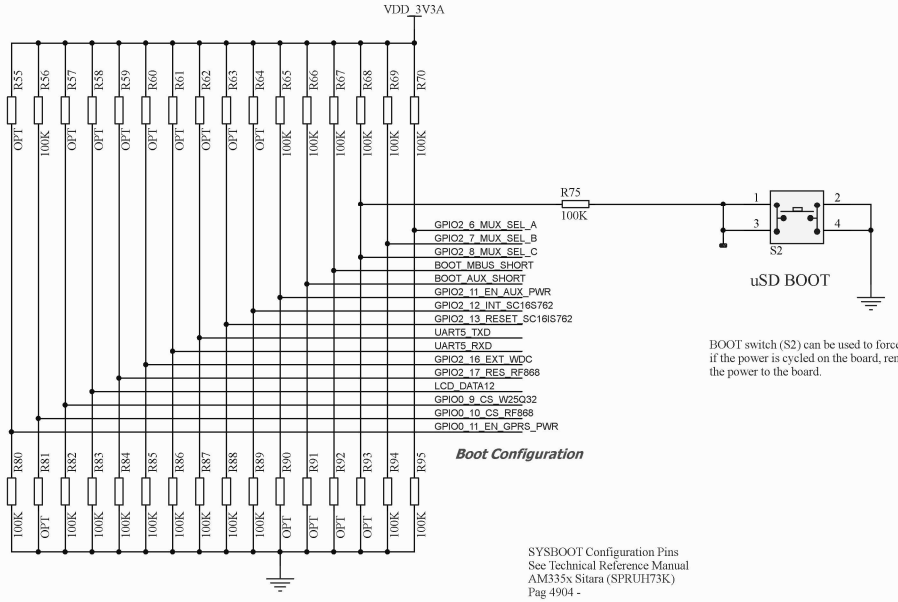

Boot Configuration

BOOT switch (S2) can be used to force a boot from the microSD card if the power is cycled on the board, removing power and reapplying the power to the board.

SYSBOOT Configuration Pins
See Technical Reference Manual
AM335x Sitara (SPRUH73K)
Pag 4904 -

BOOT ORDER....MMC....SPI....UART....USB.....24MHZ

Boot Modes

eMMC Boot…This is the default boot mode and will allow for the fastest boot time.

SD Boot…This mode will boot from the microSD slot. This mode can be used to override what is on the eMMC device and can be used to program the eMMC when used in the manufacturing process or for field updates.

Serial Boot…This mode will use the serial port to allow downloading of the software direct. A separate USB to serial cable is required to use this port.

USB Boot…This mode supports booting over the USB port.

A switch (S2) is provided to allow switching between the modes

Holding the boot switch (S2) down during a removal and reapplication of power without a microSD card inserted will force the boot source to be the USB port and if nothing is detected on the USB client port, it will go to the serial port for download.

Without holding the switch (S2), the board will boot try to boot from the eMMC. If it is empty, then it will try booting from the microSD slot, followed by the serial port, and then the USB port.

If you hold the boot switch (S2) down during the removal and reapplication of power to the board, and you have a microSD card inserted with a bootable image, the board will boot from the microSD card.

NOTE: Pressing the RESET button on the board will NOT result in a change of the boot mode. You MUST remove power and reapply power to change the boot mode. The boot pins are sampled during power on reset from the PMIC to the processor. The reset button on the board is a warm reset only and will not force a boot mode change.

SYSBOOT[15:14]	SYSBOOT[13:12]	SYSBOOT[11:10]	SYSBOOT[9]	SYSBOOT[8]	SYSBOOT[7:6]	SYSBOOT[5]	SYSBOOT[4:0]	Boot Sequence			
00b = 19.2MHz 01b = 24MHz 10b = 25MHz 11b = 26MHz	00b (all other values reserved)	Don't care for ROM code	Don't care for ROM code	Don't care for ROM code	Don't care for ROM code	0 = CLKOUT1 disabled 1 = CLKOUT1 enabled	11100b	MMC1	MMC0	UART0	USB0[5]
00b = 19.2MHz 01b = 24MHz 10b = 25MHz 11b = 26MHz	00b (all other values reserved)	Don't care for ROM code	Don't care for ROM code	Don't care for ROM code	Don't care for ROM code	0 = CLKOUT1 disabled 1 = CLKOUT1 enabled	11000b	SPI0	MMC0	USB0[5]	UART0

Title **Boot Order**			*ASB Security* *Boschdijk 720* *5624CL Eindhoven*
Size: A3	Number:	Revision:V4.1	
Date: 28-Sep-17	Time: 12:17:00	Sheet8 of 15	
File: D:\Projects\Altium_2013\CCS32_V4\CCS32_V4.1\P08_CCS32_BootOrder.SchDoc			