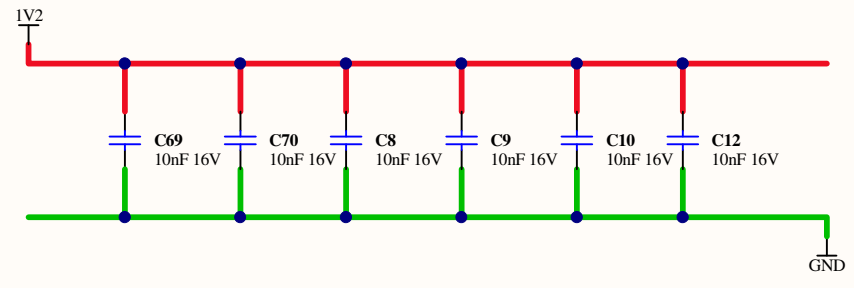
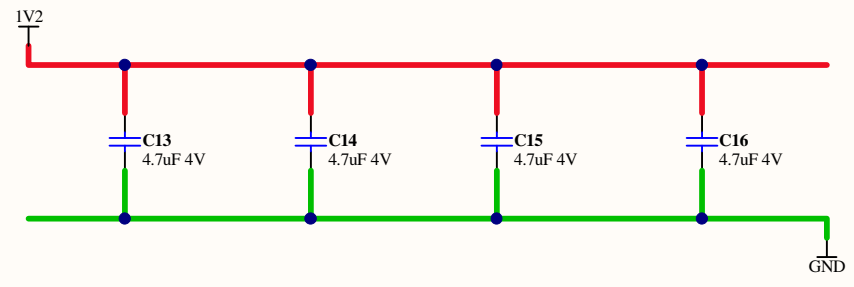
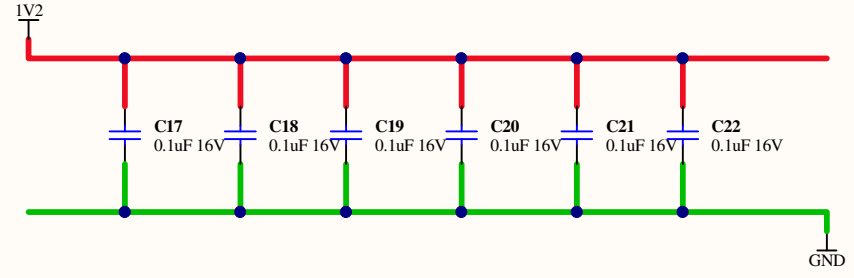
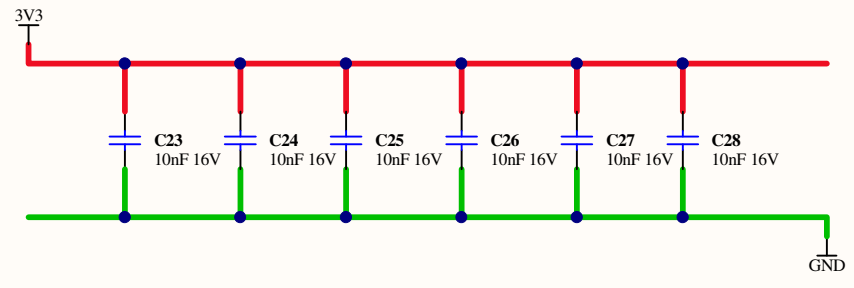
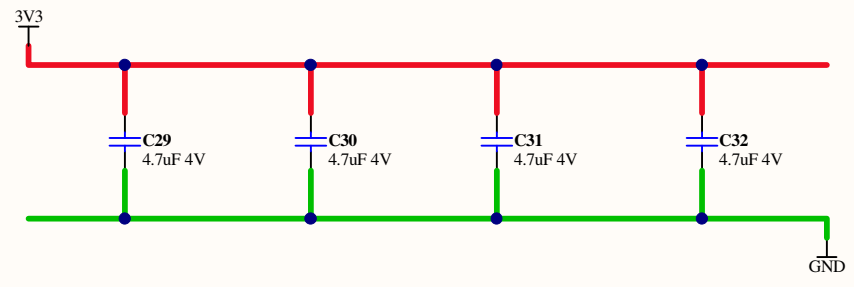
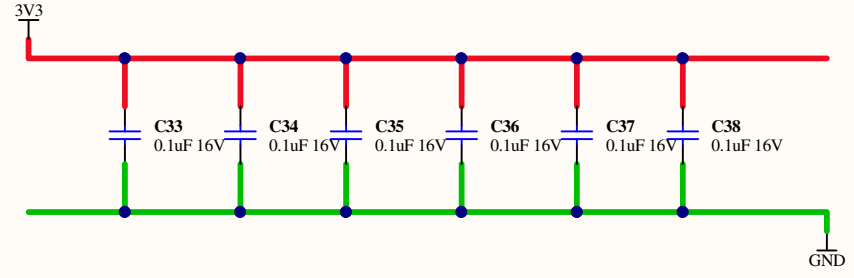



PCB1
SOM02 Blank PCB
Printed Circuit Board (Bare)

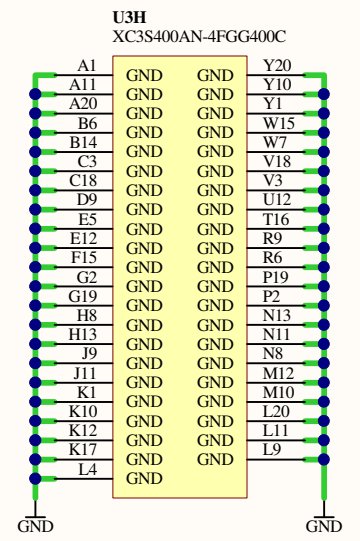
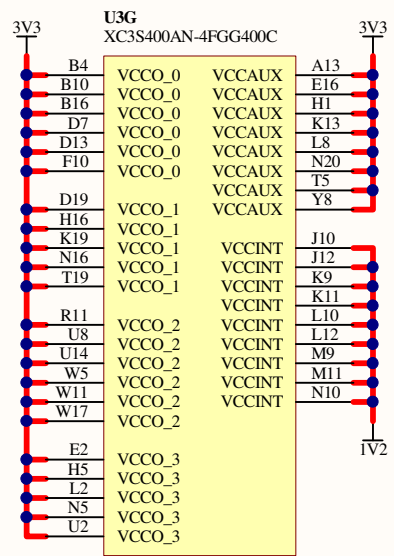
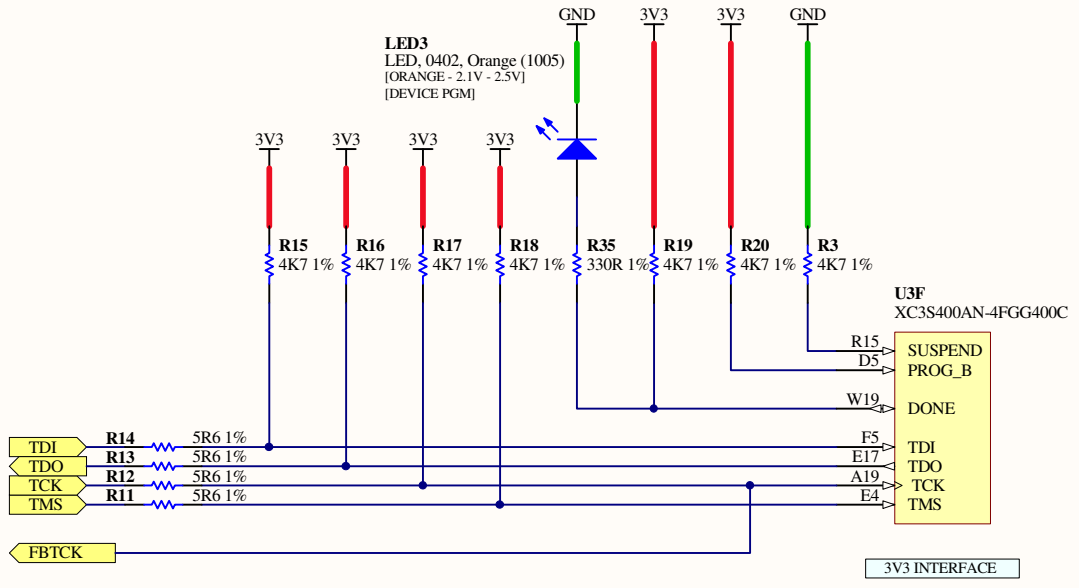
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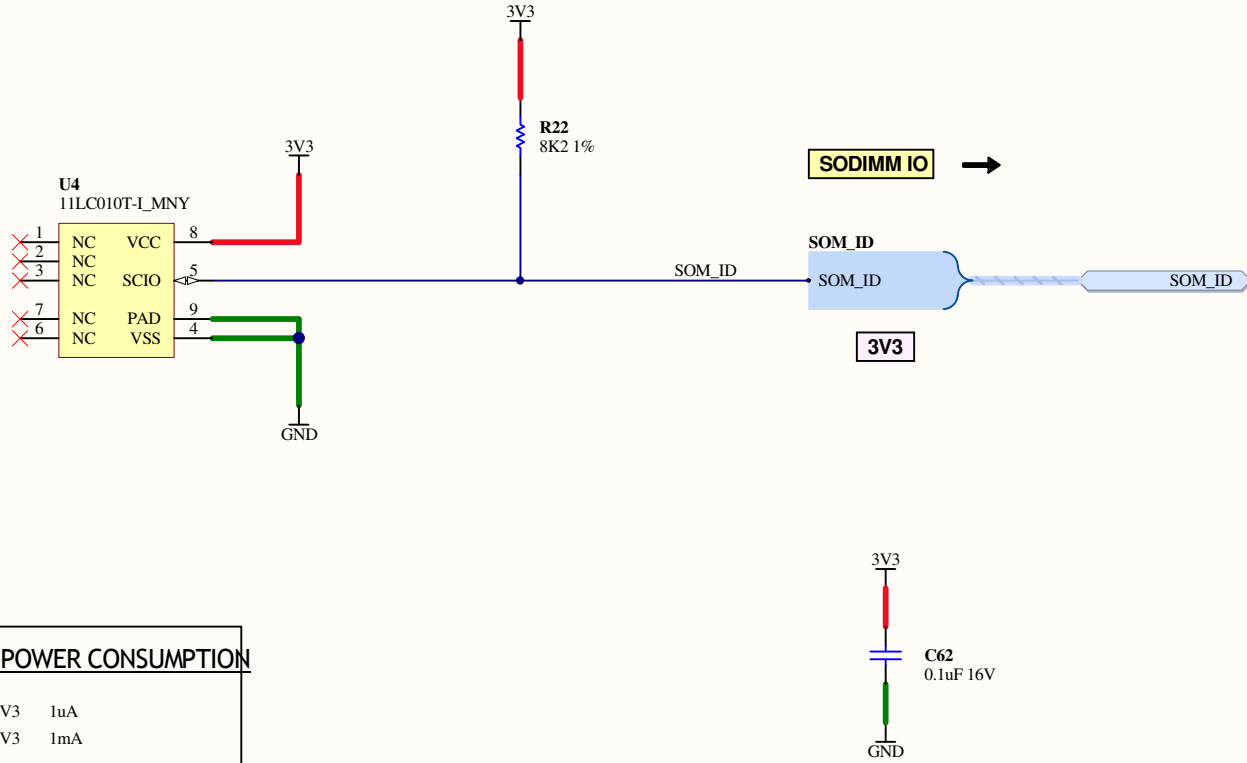


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Project Title SOM02			
Size: A4	Assy: TBA	Revision: 04	
Date: 23/09/2011	Time: 1:22:40 PM	Sheet 2 of 12	
File: FPGA_Bypass_FPGA_1V2.SchDoc			



Sheet Title FPGA Bypass 2V5		Altium Limited 3 Minna Close Belrose NSW 2085 Australia	
Project Title SOM02			
Size: A4	Assy: TBA	Revision: 04	
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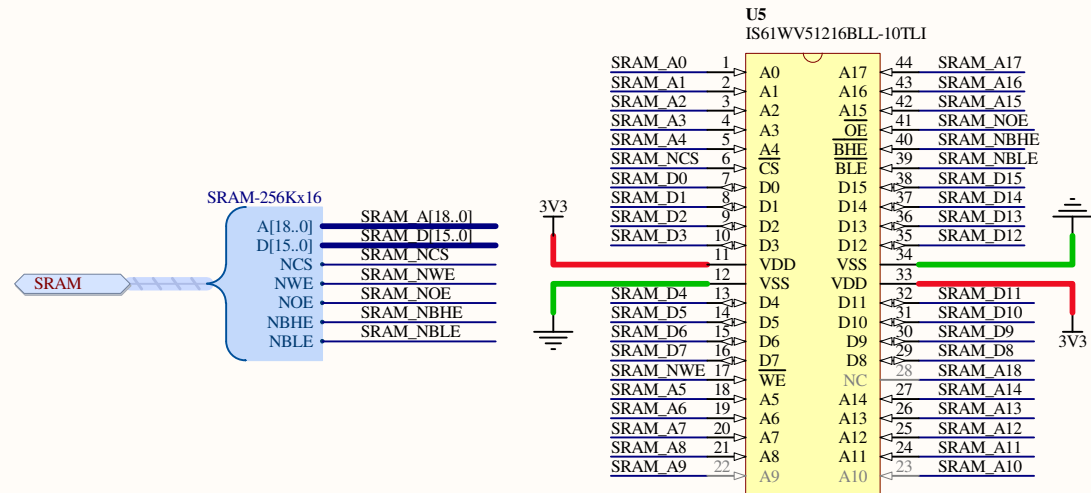




11LC010T-L_MNY POWER CONSUMPTION

STANDBY: 3V3 1uA
ACTIVE: 3V3 1mA

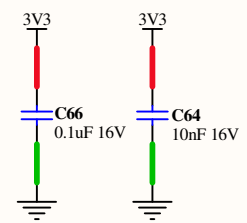
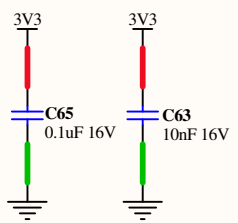
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Size A4	Number	Revision
Date: 23/09/2011	Sheet of	
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IS61WV25616BLS FAST SRAM (10nS)
256K x16 BITS 512K bytes

DEFAULT
IS61WV51216BLL-10TLI FAST SRAM (10nS)
512K x16 BITS 1M bytes

IS61WV2048BLL-10TLI FAST SRAM (10nS)
2048K x8 BITS 2M bytes



Sheet Title 512K x 16-Bit SRAM		Altium Limited 3 Minna Close Belrose NSW 2085 Australia		
Project Title SOM02				
Size: A4	Assy: TBA			Revision: 04
Date: 23/09/2011	Time: 1:22:40 PM			Sheet 7 of 0
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1

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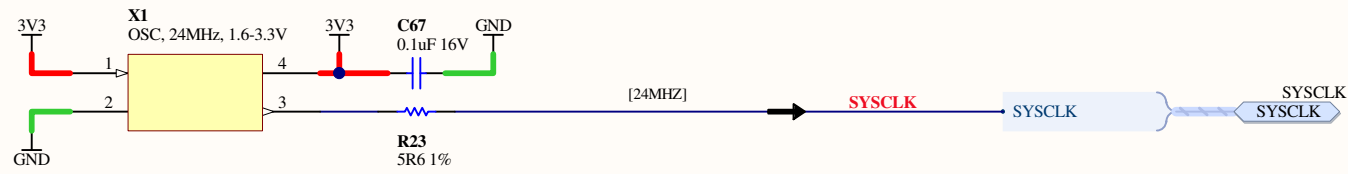
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C

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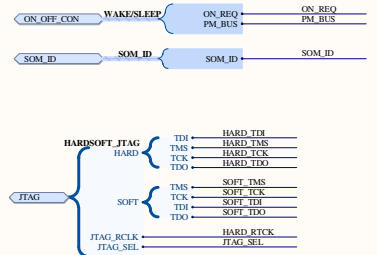
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Project Title SOM02				
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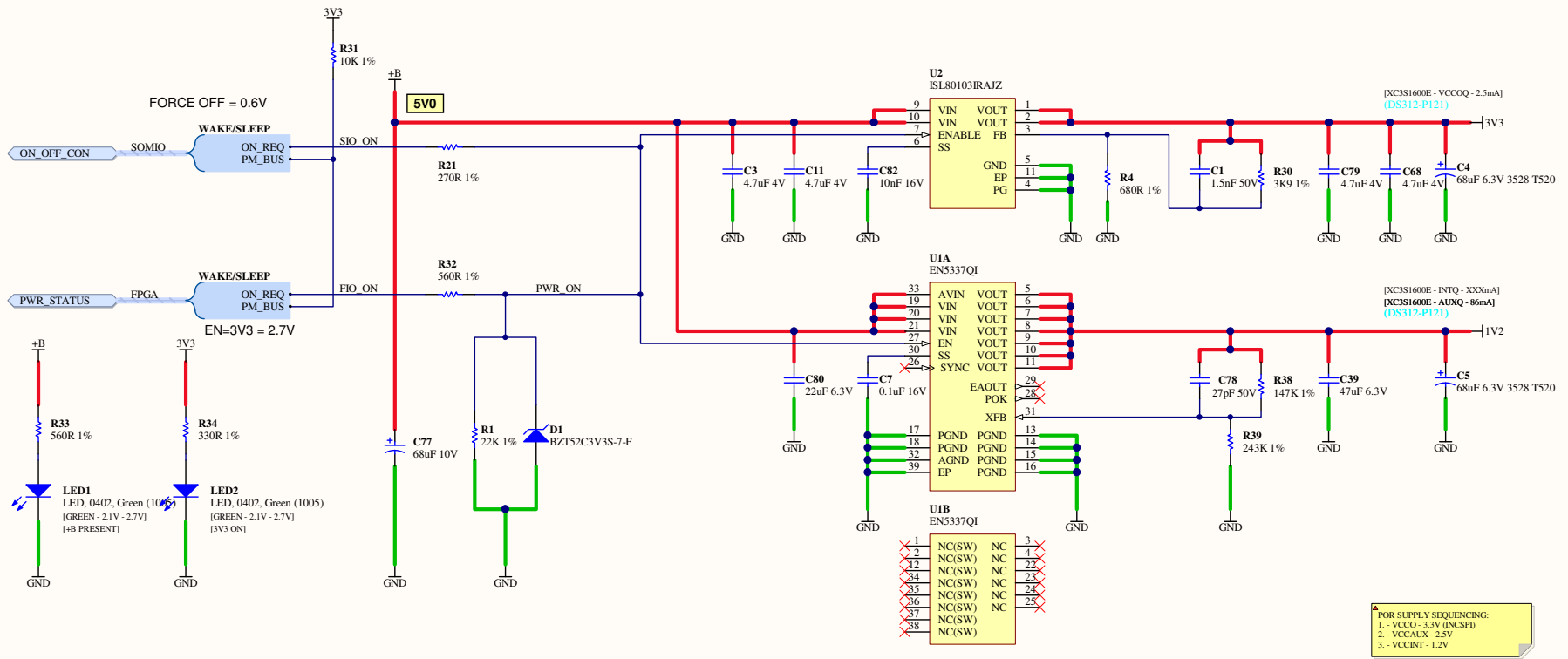
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		CNI FPGA		TOP COMP SIDE		BOTTOM SOLDER SIDE			
JTAG	JTAG_TDI	HARD_TDI	1	JTAG_TDI	2	HARD_TDI	2	JTAG_TDI	JTAG_TDI
JTAG	JTAG_TCK	HARD_TCK	4	JTAG_TCK	4	HARD_TCK	4	JTAG_TCK	JTAG_TCK
SOM ID	SOM_ID	SOM_ID	7	MODULE_ID	6	JTAG_SEL	10	JTAG_SEL	JTAG_SEL
POWER ON	ENET_Ap	GND	9	MOD_WAKE	9	GND	10	GND	GND
GIGABIT ENET	ENET_A0	FPGA_I01	10	FPGA_I0p	10	FPGA_I0h	10	FPGA_I0h	ENET_Bp
	ENET_A1	FPGA_I02	11	FPGA_I0p	11	FPGA_I0h	11	FPGA_I0h	ENET_Bh
	ENET_Cp	GND	12	GND	12	GND	12	GND	ENET_Dp
	ENET_C0	FPGA_I06	13	FPGA_I0p	13	FPGA_I0h	13	FPGA_I0h	ENET_Dh
	ENET_C1	GND	14	FPGA_I0h	14	FPGA_I0h	14	FPGA_I0h	GND
	+B	GND	21	GND	21	GND	21	GND	+B
USB2 - PORT 1	USB2_1_VBUS	PWR_OUT11	25	PWR_SW	25	PWR_SW	25	PWR_SW	USB2_2_VBUS
	USB2_1_DP	PWR_OUT11	26	PWR_SW	26	PWR_SW	26	PWR_SW	USB2_2_VBUS
	USB2_1_Dn	FPGA_I09	27	FPGA_I0p	27	FPGA_I0h	27	FPGA_I0h	USB2_2_Dp
	USB2_1_Dp	FPGA_I09	28	FPGA_I0p	28	FPGA_I0h	28	FPGA_I0h	USB2_2_Dn
	USB2_OTG	GND	37	GND	37	GND	37	GND	GND
SMB/PM BUS	UART1_TXD	SOFT_TSD	38	PM_BUS	38	FPGA_I01	38	FPGA_I01	UART2_TXD
UART - PORT 1	UART1_RTS	SOFT_TMS	39	SOFT_TDO	39	FPGA_I01	39	FPGA_I01	UART2_RTS
	UART1_RXD	SOFT_TMS	40	SOFT_TMS	40	FPGA_I01	40	FPGA_I01	UART2_RXD
	UART1_CTS	SOFT_TDI	41	SOFT_TDI	41	FPGA_I01	41	FPGA_I01	UART2_CTS
	GND	SOFT_TCK	42	SOFT_TCK	42	FPGA_I01	42	FPGA_I01	GND
SPI - PORT 1	SPI1_TXD	GND	57	GND	57	GND	57	GND	I2S_CS
	SPI1_RXD	FPGA_I04	58	FPGA_I01	58	FPGA_I01	58	FPGA_I01	I2S_CDOUT
	SPI1_CLK	FPGA_I05	59	FPGA_I01	59	FPGA_I01	59	FPGA_I01	I2S_CLK
	SPI1_CS	FPGA_I06	60	FPGA_I01	60	FPGA_I01	60	FPGA_I01	I2S_CIN
	SPI2_TXD	FPGA_I07	61	FPGA_I01k	61	FPGA_I01k	61	FPGA_I01k	I2S_INCLK
	SPI2_RXD	FPGA_I08	62	FPGA_I01	62	FPGA_I01	62	FPGA_I01	I2S_SCLK
	SPI2_CLK	FPGA_I09	63	FPGA_I01	63	FPGA_I01	63	FPGA_I01	I2S_SIN
	SPI2_CS	FPGA_I10	64	FPGA_I01k	64	FPGA_I01k	64	FPGA_I01k	I2S_SDOUT
	GND	FPGA_I05	65	FPGA_I01k	65	FPGA_I01k	65	FPGA_I01k	GND
	+B	GND	77	GND	77	GND	77	GND	+B
	+B	GND	78	GND	78	GND	78	GND	+B
	+B	GND	79	GND	79	GND	79	GND	+B
	+B	GND	80	GND	80	GND	80	GND	+B
AHB CPU BUS	BUS_A0	FPGA_I00	81	FPGA_I01	81	FPGA_I01	81	FPGA_I01	BUS_D0
	BUS_A1	FPGA_I00	82	FPGA_I01	82	FPGA_I01	82	FPGA_I01	BUS_D1
	BUS_A2	FPGA_I01	83	FPGA_I01	83	FPGA_I01	83	FPGA_I01	BUS_D2
	BUS_A3	FPGA_I02	84	FPGA_I01	84	FPGA_I01	84	FPGA_I01	BUS_D3
	BUS_A4	FPGA_I03	85	FPGA_I01	85	FPGA_I01	85	FPGA_I01	BUS_D4
	BUS_A5	FPGA_I04	86	FPGA_I01	86	FPGA_I01	86	FPGA_I01	BUS_D5
	BUS_A6	FPGA_I05	87	FPGA_I01	87	FPGA_I01	87	FPGA_I01	BUS_D6
	BUS_A7	FPGA_I06	88	FPGA_I01	88	FPGA_I01	88	FPGA_I01	BUS_D7
	BUS_A8	FPGA_I07	89	FPGA_I01	89	FPGA_I01	89	FPGA_I01	BUS_D8
	BUS_A9	FPGA_I08	90	FPGA_I01	90	FPGA_I01	90	FPGA_I01	BUS_D9
	BUS_A10	FPGA_I09	91	FPGA_I01	91	FPGA_I01	91	FPGA_I01	BUS_D10
	BUS_A11	FPGA_I00	92	FPGA_I01	92	FPGA_I01	92	FPGA_I01	BUS_D11
	BUS_A12	FPGA_I01	93	FPGA_I01	93	FPGA_I01	93	FPGA_I01	BUS_D12
	BUS_A13	FPGA_I02	94	FPGA_I01	94	FPGA_I01	94	FPGA_I01	BUS_D13
	BUS_A14	FPGA_I03	95	FPGA_I01	95	FPGA_I01	95	FPGA_I01	BUS_D14
	BUS_A15	FPGA_I04	96	FPGA_I01	96	FPGA_I01	96	FPGA_I01	BUS_D15
	GND	FPGA_I05	97	FPGA_I01	97	FPGA_I01	97	FPGA_I01	GND
	BUS_A16	GND	117	GND	117	GND	117	GND	BUS_CSD
	BUS_A17	FPGA_I06	118	FPGA_I01	118	FPGA_I01	118	FPGA_I01	BUS_CSI
	BUS_A18	FPGA_I07	119	FPGA_I01	119	FPGA_I01	119	FPGA_I01	BUS_CSE
	BUS_A19	FPGA_I08	120	FPGA_I01	120	FPGA_I01	120	FPGA_I01	BUS_INT0
	BUS_A20	FPGA_I09	121	FPGA_I01	121	FPGA_I01	121	FPGA_I01	BUS_INT1
	BUS_DMACK	FPGA_I00	122	FPGA_I01	122	FPGA_I01	122	FPGA_I01	BUS_AWE
	BUS_DMARQ	FPGA_I01	123	FPGA_I01	123	FPGA_I01	123	FPGA_I01	BUS_WAIT
	BUS_AADV	FPGA_I02	124	FPGA_I01	124	FPGA_I01	124	FPGA_I01	BUS_CLK
	BUS_AOE	FPGA_I03	125	FPGA_I01	125	FPGA_I01	125	FPGA_I01	BUS_DAT0
	+B	FPGA_I04	126	FPGA_I01	126	FPGA_I01	126	FPGA_I01	BUS_DAT1
	+B	GND	137	GND	137	GND	137	GND	BUS_DAT2
	+B	GND	138	GND	138	GND	GND	BUS_DAT3	
	+B	GND	139	GND	139	GND	GND	BUS_CMD	
	FXD0	FPGA_I08	141	FPGA_I01	141	FPGA_I01	141	FPGA_I01	SDI_CMD
	FXD1	FPGA_I09	142	FPGA_I01	142	FPGA_I01	142	FPGA_I01	SDI_CD
	FXD2	FPGA_I00	143	FPGA_I01	143	FPGA_I01	143	FPGA_I01	SDI_PWR
	FXD3	FPGA_I01	144	FPGA_I01	144	FPGA_I01	144	FPGA_I01	SDI_DAT0
	FXD4	FPGA_I02	145	FPGA_I01	145	FPGA_I01	145	FPGA_I01	SDI_DAT1
	FXD5	FPGA_I03	146	FPGA_I01	146	FPGA_I01	146	FPGA_I01	SDI_DAT2
	FXD6	FPGA_I04	147	FPGA_I01	147	FPGA_I01	147	FPGA_I01	SDI_DAT3
	FXD7	FPGA_I05	148	FPGA_I01	148	FPGA_I01	148	FPGA_I01	SDI_DAT4
	FXD8	FPGA_I06	149	FPGA_I01	149	FPGA_I01	149	FPGA_I01	SDI_DAT5
	FXD9	FPGA_I07	150	FPGA_I01	150	FPGA_I01	150	FPGA_I01	SDI_CLK
	FXD10	FPGA_I08	151	FPGA_I01	151	FPGA_I01	151	FPGA_I01	SDI_CD
	FXD11	FPGA_I09	152	FPGA_I01	152	FPGA_I01	152	FPGA_I01	SDI_PWR
	FXD12	FPGA_I00	153	FPGA_I01	153	FPGA_I01	153	FPGA_I01	DPDVI_HPD
	FXD13	FPGA_I01	154	FPGA_I01	154	FPGA_I01	154	FPGA_I01	DPDVI_CLK
	FXD14	FPGA_I02	155	FPGA_I01	155	FPGA_I01	155	FPGA_I01	DPDVI_DAT
	FXD15	FPGA_I03	156	FPGA_I01	156	FPGA_I01	156	FPGA_I01	GND
	FXD16	FPGA_I04	157	FPGA_I01	157	FPGA_I01	157	FPGA_I01	DPDVI_p0
	FXD17	FPGA_I05	158	FPGA_I01	158	FPGA_I01	158	FPGA_I01	DPDVI_p1
	FXD18	FPGA_I06	159	FPGA_I01	159	FPGA_I01	159	FPGA_I01	DPDVI_p2
	FXD19	FPGA_I07	160	FPGA_I01	160	FPGA_I01	160	FPGA_I01	DPDVI_p3
	FXD20	FPGA_I08	161	FPGA_I01	161	FPGA_I01	161	FPGA_I01	GND
	FXD21	FPGA_I09	162	FPGA_I01	162	FPGA_I01	162	FPGA_I01	DPDVI_p4
	FXD22	FPGA_I00	163	FPGA_I01	163	FPGA_I01	163	FPGA_I01	DPDVI_p5
	FXD23	FPGA_I01	164	FPGA_I01	164	FPGA_I01	164	FPGA_I01	GND
	FXD24	FPGA_I02	165	FPGA_I01	165	FPGA_I01	165	FPGA_I01	DPDVI_p6
	FXD25	FPGA_I03	166	FPGA_I01	166	FPGA_I01	166	FPGA_I01	DPDVI_p7
	FXD26	FPGA_I04	167	FPGA_I01	167	FPGA_I01	167	FPGA_I01	DPDVI_p8
	FXD27	FPGA_I05	168	FPGA_I01	168	FPGA_I01	168	FPGA_I01	DPDVI_p9
	FXD28	FPGA_I06	169	FPGA_I01	169	FPGA_I01	169	FPGA_I01	DPDVI_p10
	FXD29	FPGA_I07	170	FPGA_I01	170	FPGA_I01	170	FPGA_I01	DPDVI_p11
	FXD30	FPGA_I08	171	FPGA_I01	171	FPGA_I01	171	FPGA_I01	DPDVI_p12
	FXD31	FPGA_I09	172	FPGA_I01	172	FPGA_I01	172	FPGA_I01	DPDVI_p13
	FXD32	FPGA_I00	173	FPGA_I01	173	FPGA_I01	173	FPGA_I01	DPDVI_p14
	FXD33	FPGA_I01	174	FPGA_I01	174	FPGA_I01	174	FPGA_I01	DPDVI_p15
	FXD34	FPGA_I02	175	FPGA_I01	175	FPGA_I01	175	FPGA_I01	DPDVI_p16
	FXD35	FPGA_I03	176	FPGA_I01	176	FPGA_I01	176	FPGA_I01	DPDVI_p17
	FXD36	FPGA_I04	177	FPGA_I01	177	FPGA_I01	177	FPGA_I01	DPDVI_p18
	FXD37	FPGA_I05	178	FPGA_I01	178	FPGA_I01	178	FPGA_I01	DPDVI_p19
	FXD38	FPGA_I06	179	FPGA_I01	179	FPGA_I01	179	FPGA_I01	DPDVI_p20
	FXD39	FPGA_I07	180	FPGA_I01	180	FPGA_I01	180	FPGA_I01	DPDVI_p21
	FXD40	FPGA_I08	181	FPGA_I01	181	FPGA_I01	181	FPGA_I01	DPDVI_p22
	FXD41	FPGA_I09	182	FPGA_I01	182	FPGA_I01	182	FPGA_I01	DPDVI_p23
	FXD42	FPGA_I00	183	FPGA_I01	183	FPGA_I01	183	FPGA_I01	DPDVI_p24
	FXD43	FPGA_I01	184	FPGA_I01	184	FPGA_I01	184	FPGA_I01	DPDVI_p25
	FXD44	FPGA_I02	185	FPGA_I01	185	FPGA_I01	185	FPGA_I01	DPDVI_p26
	FXD45	FPGA_I03	186	FPGA_I01	186	FPGA_I01	186	FPGA_I01	DPDVI_p27
	FXD46	FPGA_I04	187	FPGA_I01	187	FPGA_I01	187	FPGA_I01	DPDVI_p28
	FXD47	FPGA_I05	188	FPGA_I01	188	FPGA_I01	188	FPGA_I01	DPDVI_p29
	FXD48	FPGA_I06	189	FPGA_I01	189	FPGA_I01	189	FPGA_I01	DPDVI_p30
	FXD49	FPGA_I07	190	FPGA_I01	190	FPGA_I01	190	FPGA_I01	DPDVI_p31
	FXD50	FPGA_I08	191	FPGA_I01	191	FPGA_I01	191	FPGA_I01	DPDVI_p32
	FXD51	FPGA_I09	192	FPGA_I01	192	FPGA_I01	192	FPGA_I01	DPDVI_p33
	FXD52	FPGA_I00	193	FPGA_I01	193	FPGA_I01	193	FPGA_I01	DPDVI_p34
	FXD53	FPGA_I01	194	FPGA_I01	194	FPGA_I01	194	FPGA_I01	DPDVI_p35
	FXD54	FPGA_I02	195	FPGA_I01	195	FPGA_I01	195	FPGA_I01	DPDVI_p36
	FXD55	FPGA_I03	196	FPGA_I01	196	FPGA_I01	196	FPGA_I01	DPDVI_p37
	FXD56	FPGA_I04	197	FPGA_I01	197	FPGA_I01	197	FPGA_I01	DPDVI_p38
	FXD57	FPGA_I05	198	FPGA_I01	198	FPGA_I01	198	FPGA_I01	DPDVI_p39
	FXD58	FPGA_I06	199	FPGA_I01	199	FPGA_I01	199	FPGA_I01	DPDVI_p40
	FXD59	FPGA_I07	200	FPGA_I01	200	FPGA_I01	200	FPGA_I01	DPDVI_p41
	FXD60	FPGA_I08	201	FPGA_I01	201	FPGA_I01	201	FPGA_I01	DPDVI_p42
	FXD61	FPGA_I09	202	FPGA_I01	202	FPGA_I01	202	FPGA_I01	DPDVI_p43
	FXD62	FPGA_I00</							



A

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A

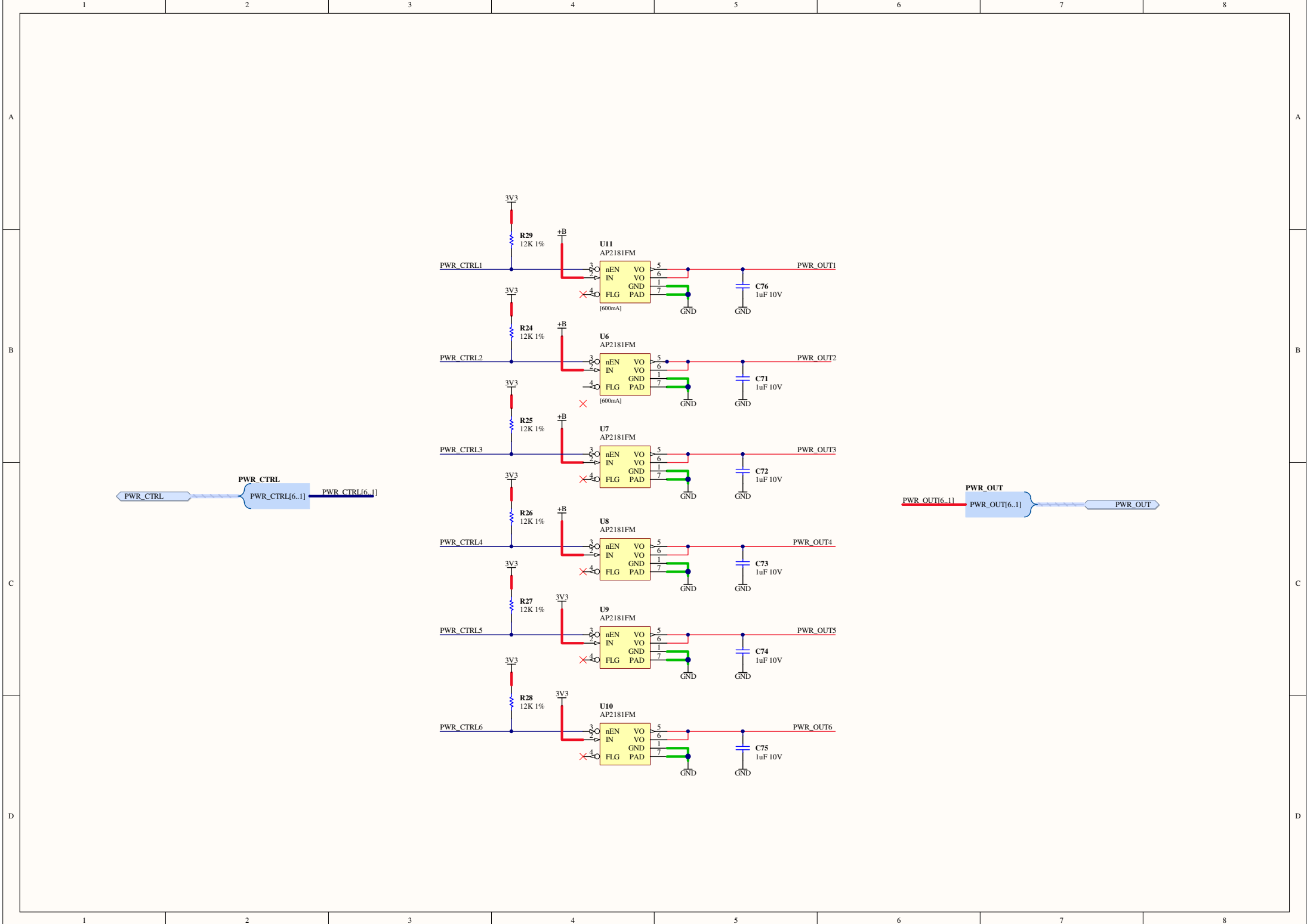
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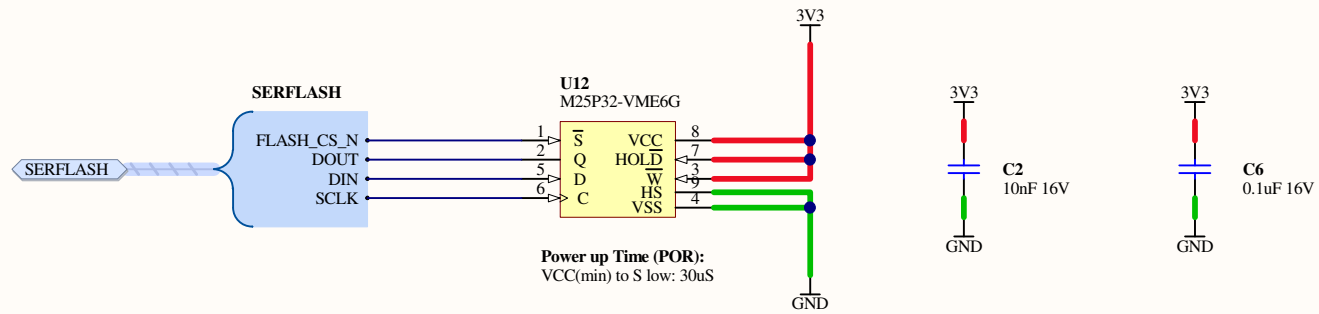
C

D

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8





Power up Time (POR):
VCC(min) to S low: 30uS

DEFAULT

M25P32-VME6G 32Mbit Serial PROM (75MHz)

33,554,432 BITS 4M bytes

(ID=0x2016)

M25P64-VME6G 64Mbit Serial PROM (75MHz)

67,108,864 BITS 8M bytes

(ID=0x2017)

M25P128-VME6G 128Mbit Serial PROM (54MHz)


134,217,728 BITS 16M bytes

(ID=0x2018)

W25Q256FV 256Mbit Serial PROM (80MHz)

268,435,456 BITS 32M bytes

(ID=0x4019)

Sheet Title Host - Dual Serial Flash Memory		Altium Limited 3 Minna Close Belrose NSW 2085 Australia		
Project Title SOM02				
Size: A4	Assy: TBA			Revision: 04
Date: 23/09/2011	Time: 1:22:41 PM			Sheet 12 of 12
File: FLASH_M25P_SPI.SchDoc				