

AD - A/D Converter (11) AMP - Gain Amplifier (11) DAC - D/A converter (11) E- Ethernet (4) FX2 - Hirose FX2 Connector (1)

ROM - M25P16 (6)

SD- SD RAM (12) SF - StrataFlash (12)

ST - Soft Touch Connector (1)

U - USB (3) XC - XC9572 (10)

* N	otes	are	for	pins	that	veru	between	500/1200/1600	dies
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Spartan 3E Starter Board					
Copyright 2004, 2005 Engineer: CC					
SHEET: XC3SE Banks 0 and	Author: GMA				
TITLE: S3E Starter	Rev: C.1				
Doc#: 500-087	Date: 11/1/05	Sheet:7/14			

Vcc for Bank 2 = 3.3V

VCC vor Bank 3 = 2.5V DDR

1	BANK2		1
E-RX_DU	IP1 IP2 IP3 # IP4 # IP4 L2P IP_L2P IP_L2N IP_L8P IP_L8N IP_L11P IP_L111P IP_L11P IP_L17P IP_L17P IP_L17N IP_L23P IP_L23N	IO1/VREF IO2/D5 IO3 IO5/VREF IO_L4P IO_L4N IO_L5N IO_L7P IO_L7N IO_L9P IO_L9P IO_L10P IO_L10P IO_L10P	U5 F-MDIO R9 SF-D5 P9 F-MDC R11 F-TXD0 T15 F-TXD1 R5 F-TXD2 T5 F-TXD3 R6 F-TXD4 P6 SF-D13 N7 AMP-CS P7 AMP-CS P8 DAC-CLR N8 DAC-CS R8 SF-D14 T8 SF-D15 P11 AD-CDNU
NC7 V7 NC8 V5 NC9 V6 NC10 N12 NC11 P12	IO4 * IO_L6P * IO_L6N/VREF* IO_L21P * IO_L21N *	IO_L18N IO_L19P IO_L19P/VREF IO_L20P IO_L20N	N11 SF/XC-A23 U12 SF/XC-A22 U13 SF/XC-A21 T12 SF/XC-A20 R12 SFL
SF-DZ N9 SF-D6 M9 SF-D4 U9 SF-D3 U9 SF-D2 R10 SF-D1 P10	IO_L12P/D7/GCLK12 IO_L12N/D6/GCLK13 IO_L13P/D4/GCLK14 IO_L13N/D3/GCLK15 IO_L15P/D2/GCLK2 IO_L15N/D1/GCLK3	IO_L22P/A23 IO_L22N/A22 IO_L24P/A21 IO_L24N/A20 IO_L25P/US2/A19 IO_L25N/US1/A18 IO_L26P/US0/A17	P13 R13 T14 R14 U15 US2_SF-A19 U15 US1_SF-A18 T16 USA_SF-A17
		IC10B2	

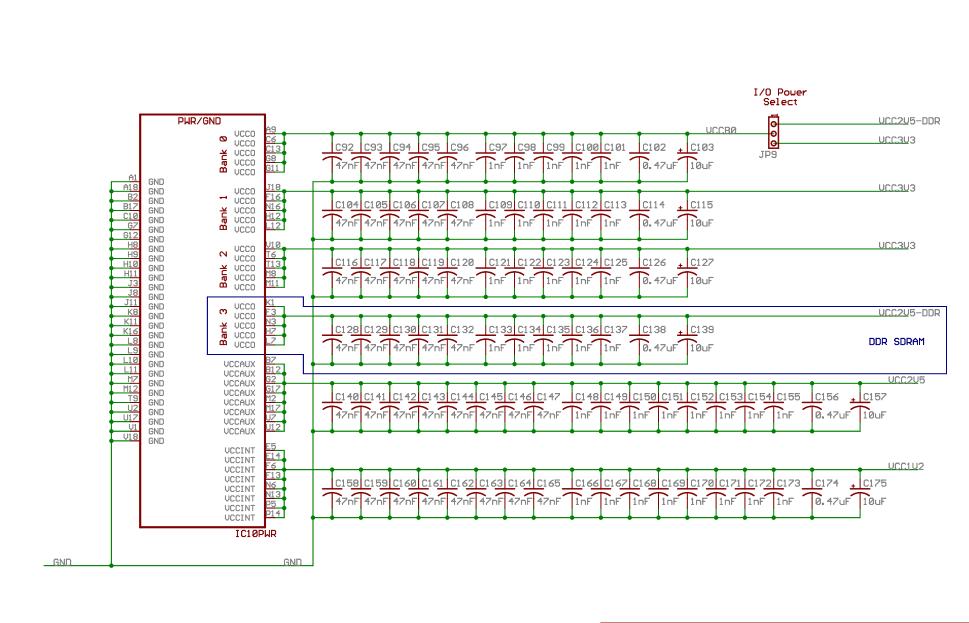
	BANK3	v	D4	NC15
D3	BINKS	* IO1	F4 -	SD-A4
D3 F <u>5</u> UCC1U25 J6	IP1 IP3	* IO2 * IO L4P	E4	
UCC1U25 J6	IP4/UREF	* IO3/VREF	R4	UCC1U25
G1	IPT/OREF	103/OREF IO_L1P	C1	SD-RAS
J7	IP6	IO_LIP	C2	SD-CAS
<u>G1</u> J <u>7</u> K <u>2</u> K <u>7</u> M <u>1</u>	IP7	IO_LIN	D1	SD-WE
K <u>7</u>	IP8	IO_L2N/VREF	D2	UCC1U25
<u>M1</u>	IP9	IO_L3P	E2	SD-DQ8
<u>N1</u> N2	IP10	IO_L3N	E1	SD-DQ9
N <u>2</u>	IP11	IO_L5P	F1	SD-DQ10
R1	IP12	10_L5N	F2	SD-DQ11
<u>U1</u>	IP13	IO_L6P	G3	SD-UDQS
	1713	IO_L6N/VREF	G4	<u>UCC1U</u> 25
		IO_L7P	G6	<u>SD-</u> DQ12
		IO_L7N	G5	<u>SD-</u> DQ13
		IO_L8P	H6	<u>SD-</u> DQ14
		IO L8N	H5	<u>SD-</u> DQ15
		IO_L9P	H 4	<u>SD-</u> A5
NC12 E3	IO_L4N *	IO_L9N	Н3	SD-A6
NC13 P3	TO 1 22D *	IO_L10P	H2	<u>SD-</u> A8
NC14 P4	IO_L22N *	IO_L10N	H1	SD-A7
		IO L15P	L1	<u>SD-</u> DQ1
		IO_L15N	L2	SD-DQ0
		IO_L16P	L3	SD-DQ2
		IO_L16N	L4	SD-DQ3
		I0_L17P	L6	SD-LDQS
		IO_L17N/VREF	L5 M4	<u>UCC1U</u> 25
		IO_L18P	M3	SD-DQ5
		IO_L18N	M5	SD-DQ4
SD-CK P J5		IO_L19P	M6	SD-DQ6 SD-DQ7
SD-CK P J5 SD-CK N J4	IO_LIIP/LUCLNO	IO_L19N	N 4	
SD-UDM J1	IU_LIIN/LHULKI	IO_L20P	N5	<u>SD-</u> A9 SD-A11
SD-LDM J2	IO_L12P/LHCLK2	IO_L20N	P2	SD-A12
SD-CKF K3	IO_L12N/LHCLK3/IRDY2	I0_L21P	P1	_SD=A3
SD-CS K4	IO_L13P/LHCLK4/TRDY2	IO_L21N	R3	
SD-BA1 K6	IU_LI3N/LHCLK5	I0_L23P	R2	SD-A2
SD-BAØ K5	IO_L14P/LHCLK6	IO_L23N	T2	SD-A10/AP
AL -DUR KO	IO_L14N/LHCLK7	IO_L24P	T1	_SD=A0
		IO_L24N		10
		IC10B3	•	
		101000		

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AMP - Gain Amplifier (11)
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FX2 - Hirose FX2 Connector (1)
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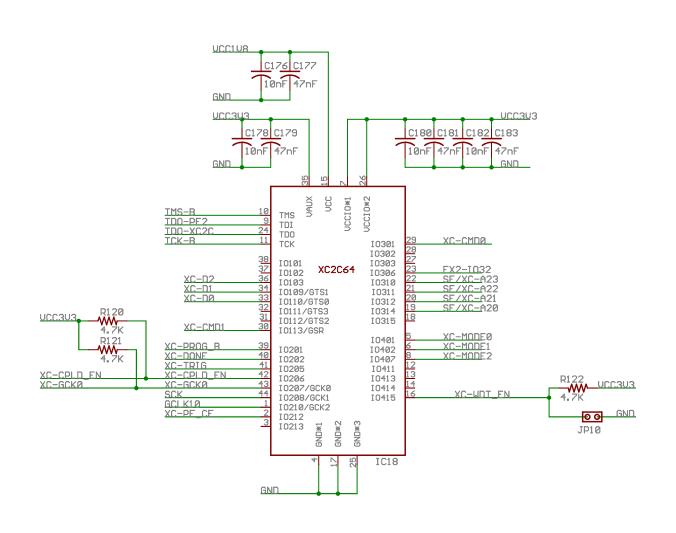
USD_SF-A1Z
USD_SF-A1Z
USD_SF-A1B
USC_SF-A19

* Notes are for pins that very between 500/1200/1600 dies

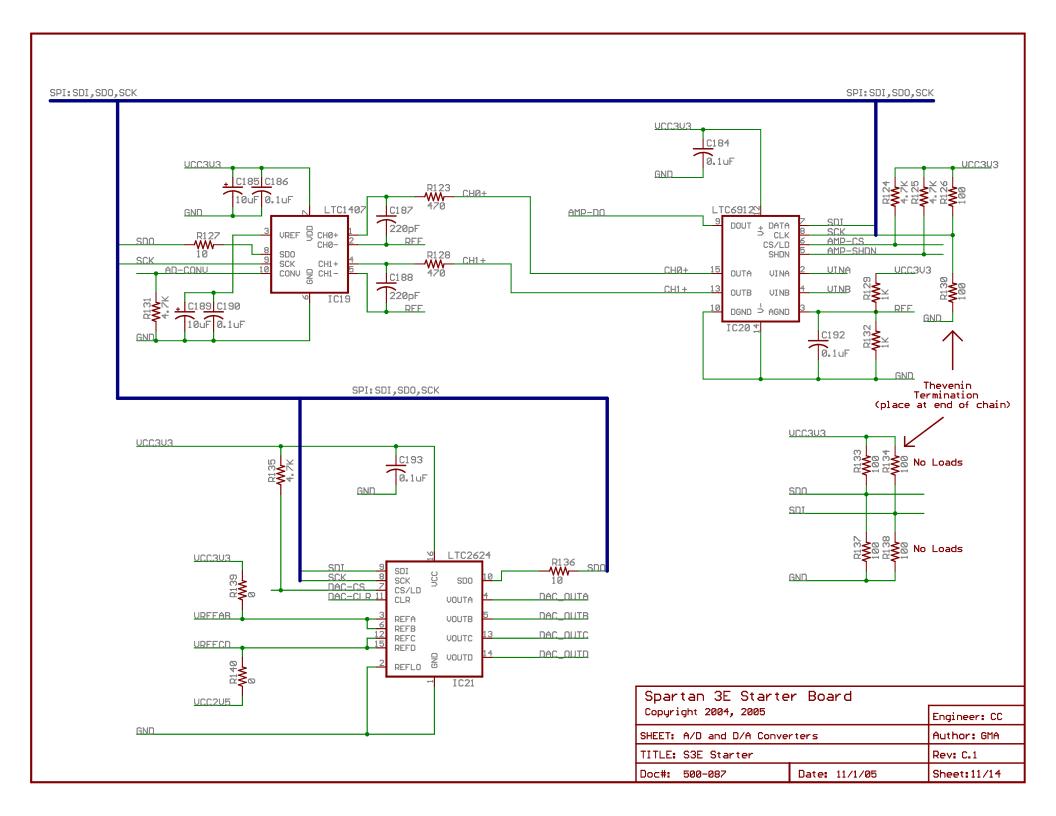
Spartan 3E Starter Board				
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SHEET: XC3SE Banks 2 and	Author: GMA			
TITLE: S3E Starter	Rev: C.1			
Doc#: 500-087	Date: 11/1/05	Sheet: 8/14		

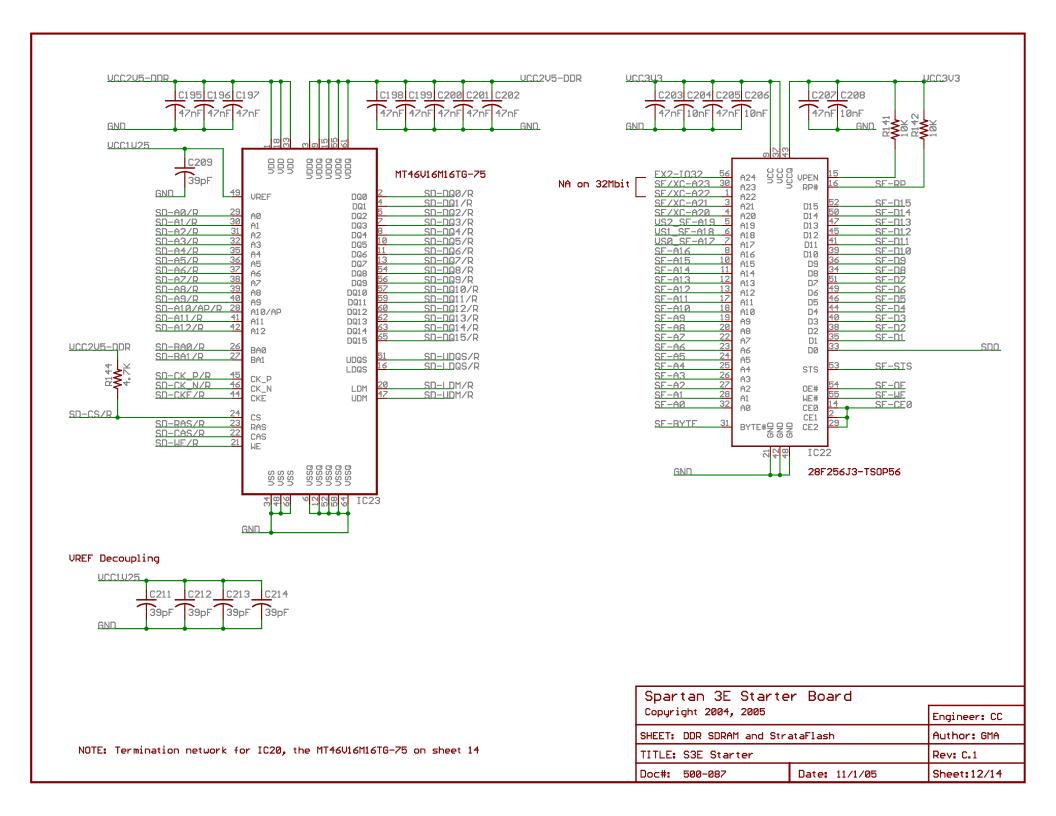


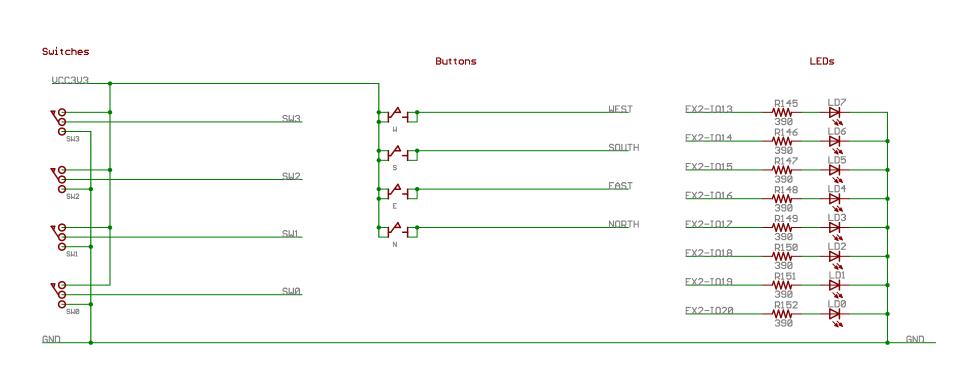
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SHEET: XC3SE Power Decou	Author: GMA			
TITLE: S3E Starter	Rev: C.1			
Doc#: 500-087	Date: 11/1/05	Sheet: 9/14		

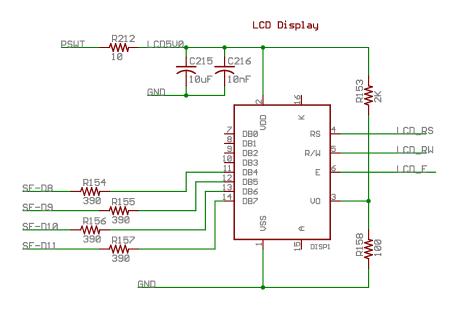


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TITLE: S3E Starter	Rev: C.1				
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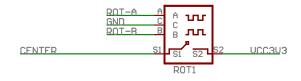




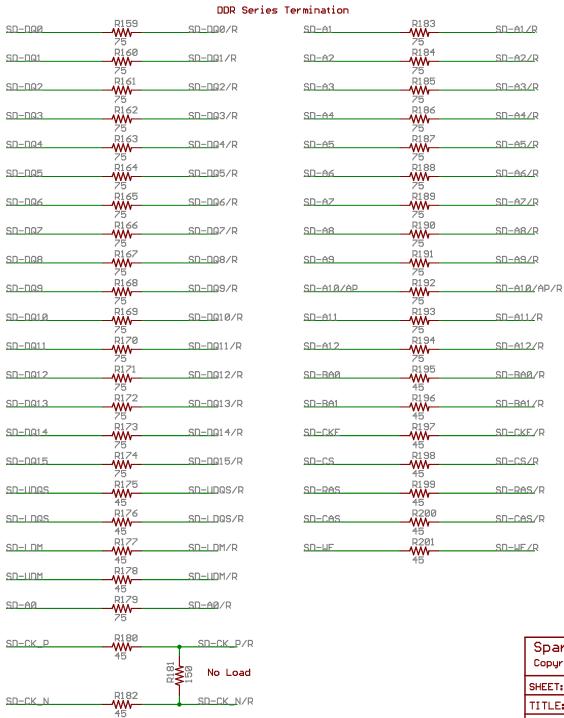




Pushbutton/Rotary Encoder



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SHEET: LCD and General IC	Author: GMA				
TITLE: S3E Starter	Rev: C.1				
Doc#: 500-087	Date: 11/1/05	Sheet:13/14			



FX2 Differential Termination Not Loaded

	NOT LOAGED	
EX2-I017	R202	FX2-I018
FX2-I019	100 R203 	FX2-I020
EX2-I021	100 R204	FX2-I022
EX2-I023	100 R205 WW 100	FX2-I <u>024</u>
EX2-I025	R206 	FX2-I026
EX2-I027	R207 	FX2-I028
FX2-I035	R208 	FX2-1036
FX2-I037	R209 	FX2-I038
FX2-CLKIN	D210	FX2-CLKOUT

Spartan 3E Starter Board					
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SHEET: DDR Memory Signal:	Author: GMA				
TITLE: S3E Starter	Rev: C.1				
Doc#: 500-087	Date: 11/1/05	Sheet: 14/14			