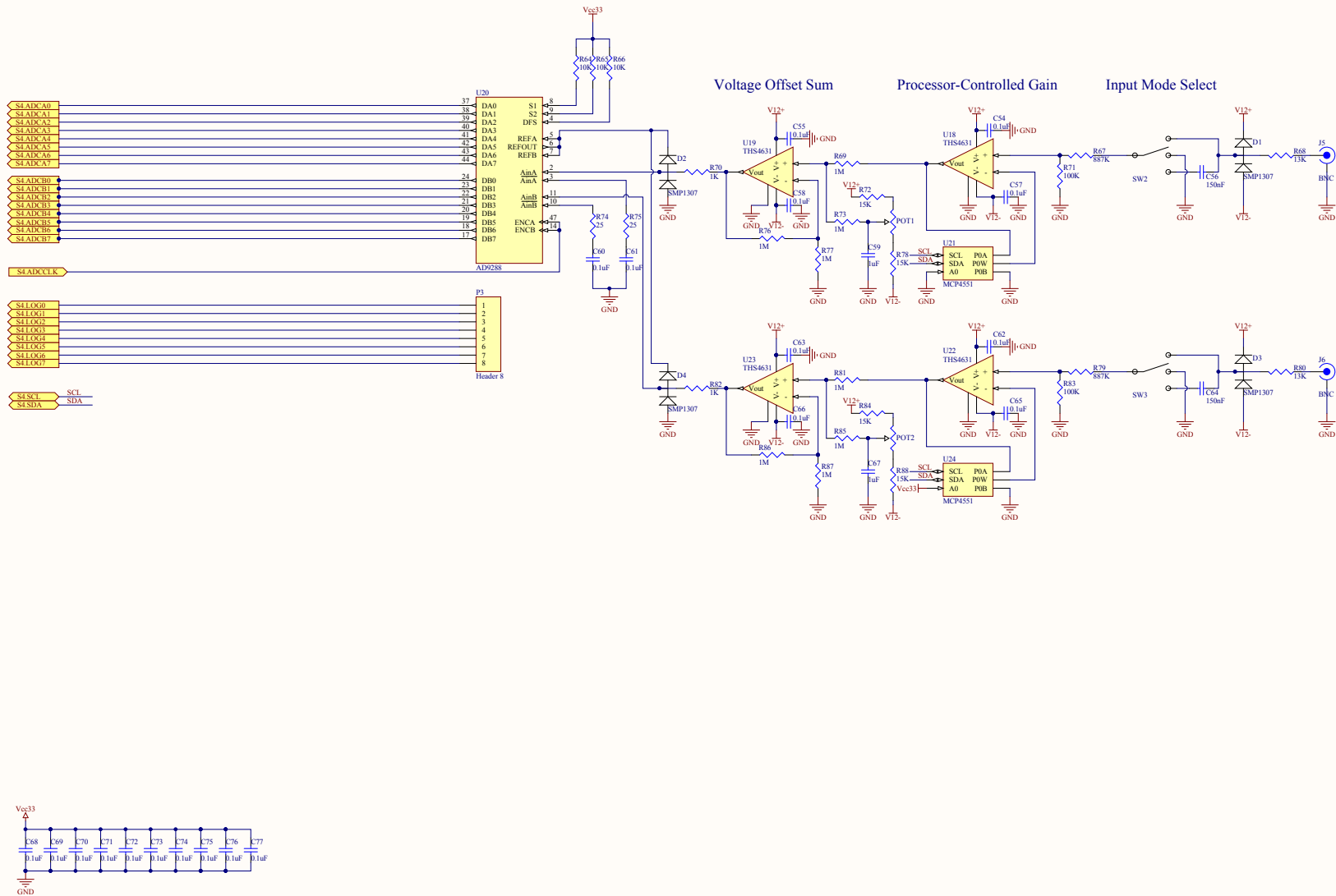
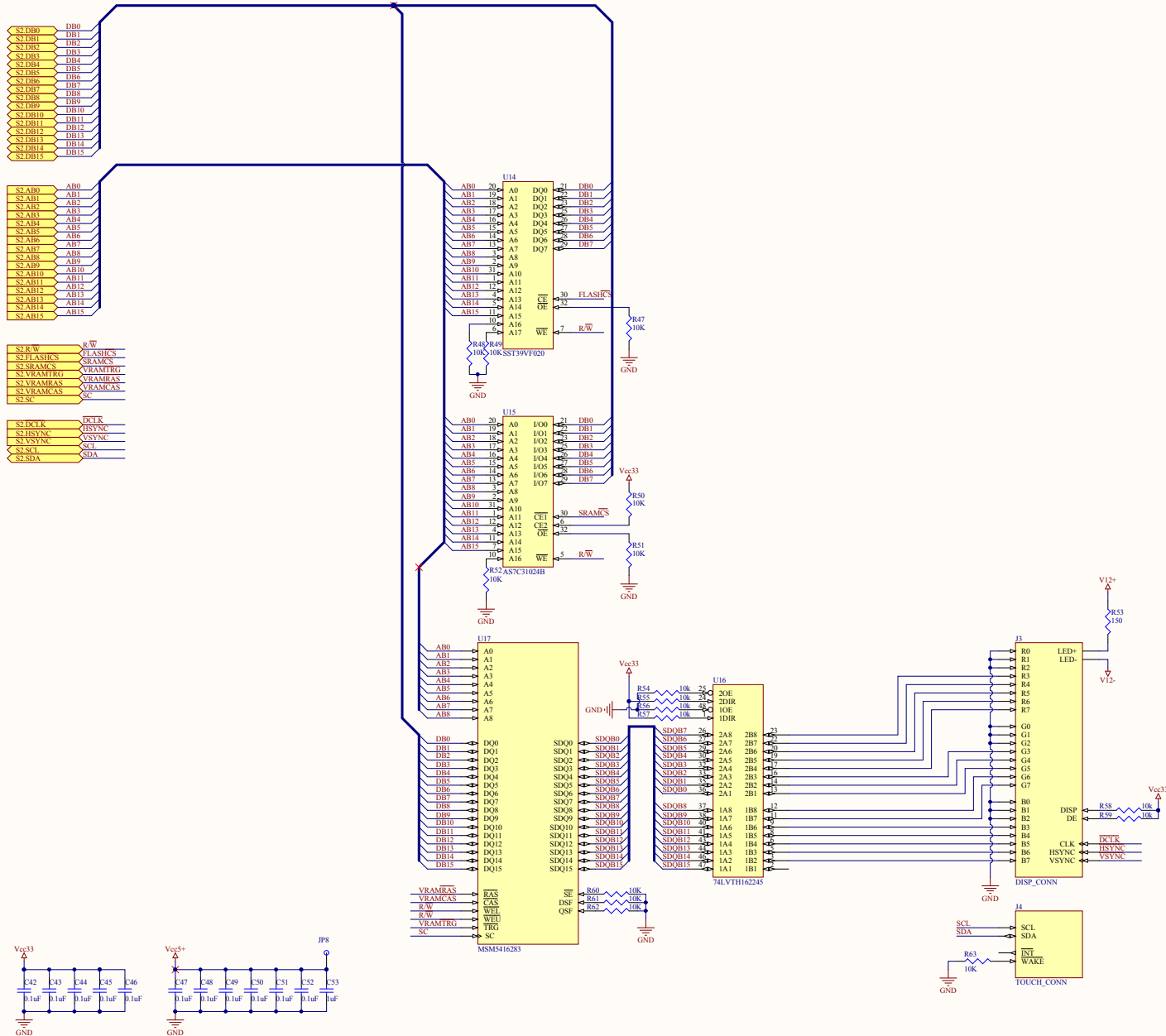


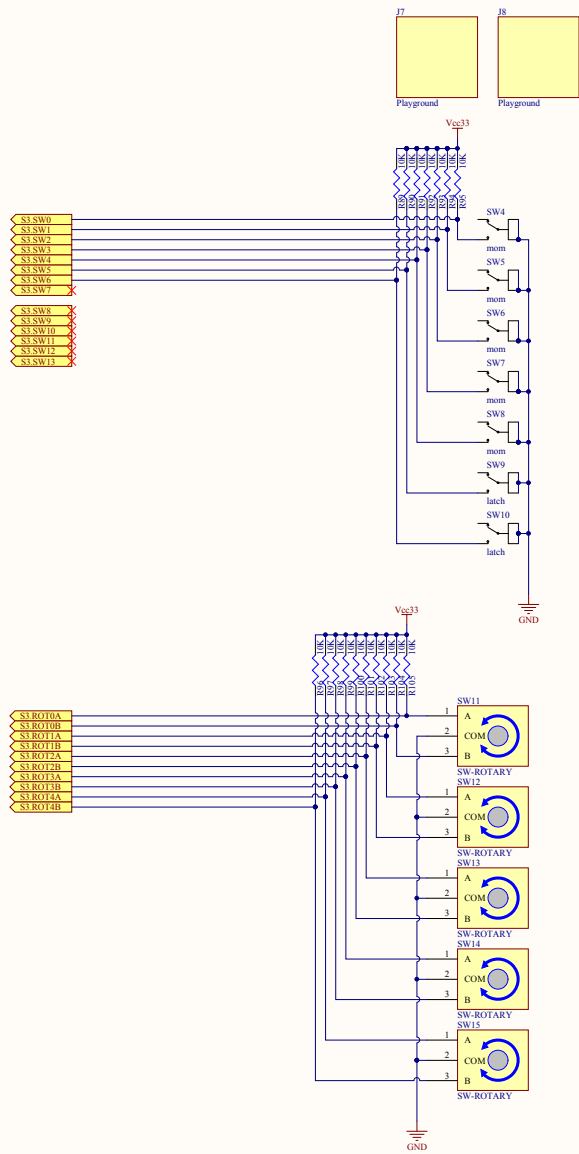
Title			Altera Cyclone III FPGA Oscilloscope	
Size	Number	Revision		
C	1	0.10		
Date:	3/18/2014	Sheet 1 of 4		
File:	C:\Users\J.FPGA\Documents\SchDoc	1	Drawn By:	Albert Gural



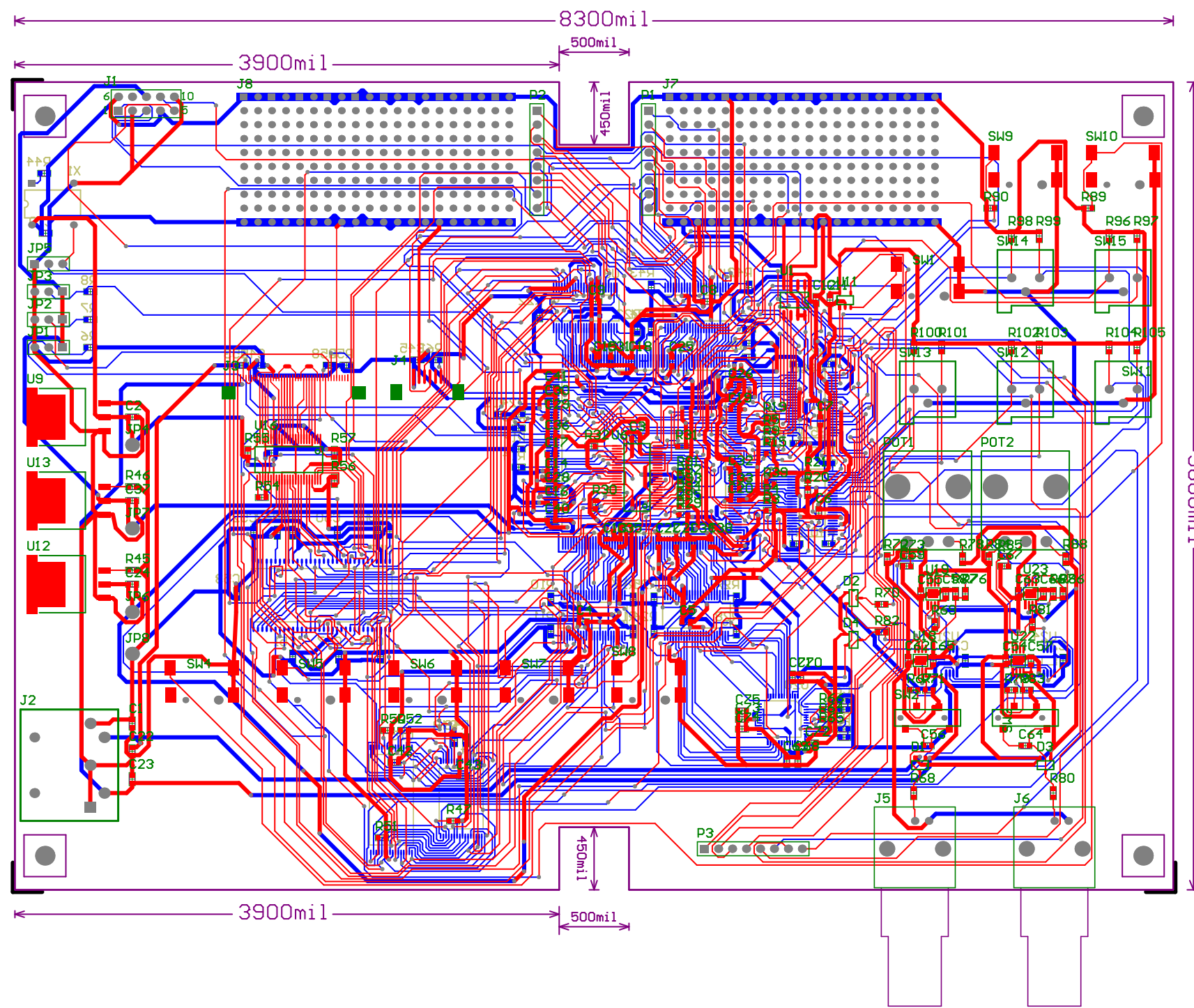
Title		
Altera Cyclone III FPGA Oscilloscope		
Size	Number	Revision
C	1	0.10
Date:	3/18/2014	Sheet 4 of 4
File:	C:\Users\JFPGA\Documents\Altera Cyclone III FPGA Oscilloscope\Altera Cyclone III FPGA Oscilloscope.sch	Author By: Albert Gural



Title		
Altera Cyclone III FPGA Oscilloscope		
Size	Number	Revision
C	1	0.10
Date:	3/18/2014	Sheet 2 of 4
File:	C:\Users\JFPGA\Documents\Memory\KSH\Bn By: Albert Gural	



Title <b>Altera Cyclone III FPGA Oscilloscope</b>		
Size C	Number 1	Revision 0.10
Date 3/18/2014	Sheet 3 of 4	
File C:\Users\JFPGA\Documents\U_Sch1\Drawn By: Albert Gural		



Neptunus 3

# Bill of Materials

FPGA Oscilloscope

Source Data From: FPGA-Oscilloscope.PrjPcb  
 Project: FPGA-Oscilloscope.PrjPcb  
 Variant: None

Creation Date: 3/18/2014 2:59:45 AM  
 Print Date: 41716 41716.12493

Footprint	Comment	LibRef	Designator	Description	Quantity
1608[0603]	10uF	Cap Semi	C1, C2, C22, C23, C24, C37	Capacitor (Semiconductor SIM Model)	6
1608[0603]	0.1uF	Cap Semi	C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52	Capacitor (Semiconductor SIM Model)	46
1608[0603]	1uF	Cap Semi	C53	Capacitor (Semiconductor SIM Model)	1
1608[0603]		Cap Semi	C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77	Capacitor (Semiconductor SIM Model)	24
SOT-23-3	SMP1307	SMP1307-005LF	D1, D2, D3, D4		4
HDR2X5_CE N	Header 5X2A	Header 5X2A	J1	Header, 5-Pin, Dual row	1
DIN5	PS_CONN	PS_CONN	J2	Elpac Compatible Power Supply Connector	1
MOLEX-40	DISP_CONN	NHD-4.3-Display connector	J3		1
MOLEX-6	TOUCH_CONN	NHD-4.3-Touch-connector	J4		1
AMP31-5540	BNC	BNC	J5, J6	BNC Connector	2
20x20	Playground	Playground	J7, J8		2
HDR1X3	Header 3	Header 3	JP1, JP2, JP3, JP5	Header, 3-Pin	4
TestPoint	TestPoint	TestPoint	JP4, JP6, JP7, JP8		4
HDR1X8	Header 8	Header 8	P1, P2, P3	Header, 8-Pin	3
POT-3	Potentiometer	Potentiometer	POT1, POT2		2
1608[0603]	1K	RES1	R1, R2, R9, R70, R82		5
1608[0603]	10K	RES1	R3, R4, R6, R7, R8, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R47, R48, R49, R50, R51, R52, R54, R55, R56, R57, R58, R59,		76
1608[0603]	25	RES1	R5, R74, R75		3
1608[0603]	1	RES1	R45, R46		2
1608[0603]	150	RES1	R53		1
1608[0603]	887K	RES1	R67, R79		2
1608[0603]	13K	RES1	R68, R80		2
1608[0603]	1M	RES1	R69, R73, R76, R77, R81, R85, R86, R87		8
1608[0603]	100K	RES1	R71, R83		2
1608[0603]	15K	RES1	R72, R78, R84, R88		4
SPDT	mom	PVB4-MOM	SW1, SW4, SW5, SW6, SW7, SW8		6
SP3T	CL-SB-13B-02T	CL-SB-13B-02T	SW2, SW3		2
SPDT	latch	PVB4-LATCH	SW9, SW10		2
VR4	SW-ROTARY	SW-ROTARY	SW11, SW12, SW13, SW14, SW15	Rotary Encoder	5
SO-8	EPCS1	EPCS1	U1	Altera Serial Configuration Device	1
TSSOP48	74LVTH162245	74LVTH162245	U2, U3, U5, U6, U7, U8, U10, U16	16-Bit Bus Transceiver	8
PQFP240	EP3C25Q240	EP3C25Q240	U4	Cyclone III EP3C-25 FPGA PQFP240	1
TO-263	LM1086	LM1086	U9, U12, U13	1.5A Low Dropout Positive Regulator	3
SOT-23	ADM8316	ADM8316	U11	Analog Devices Watchdog Timer and Reset IC	1
TSOP-32 8x14mm	SST39VF020	SST39VF020	U14	Microchip 2 Mbit (256k x 8 bit) Multi-Purpose Flash	1
TSOP-32 8x20mm	AS7C31024B	AS7C31024B	U15	Alliance 1 Mbit (128k x 8bit) SRAM	1
SSOP64	MSM5416283	MSM5416283	U17	256K x 16bit VRAM	1
DGN-8	THS4631	THS4631	U18, U19, U22, U23		4
QFP24-7x7	AD9288	AD9288	U20	Dual Channel ADC	1
MSOP-8	MCP4551	MCP4551	U21, U24		2
DIP8-4	OSCOE	OSCOE	X1	Oscillator with Active High Output Enable	1
					247

Approved

Notes
