

1

2

3

4

A

A

B

B

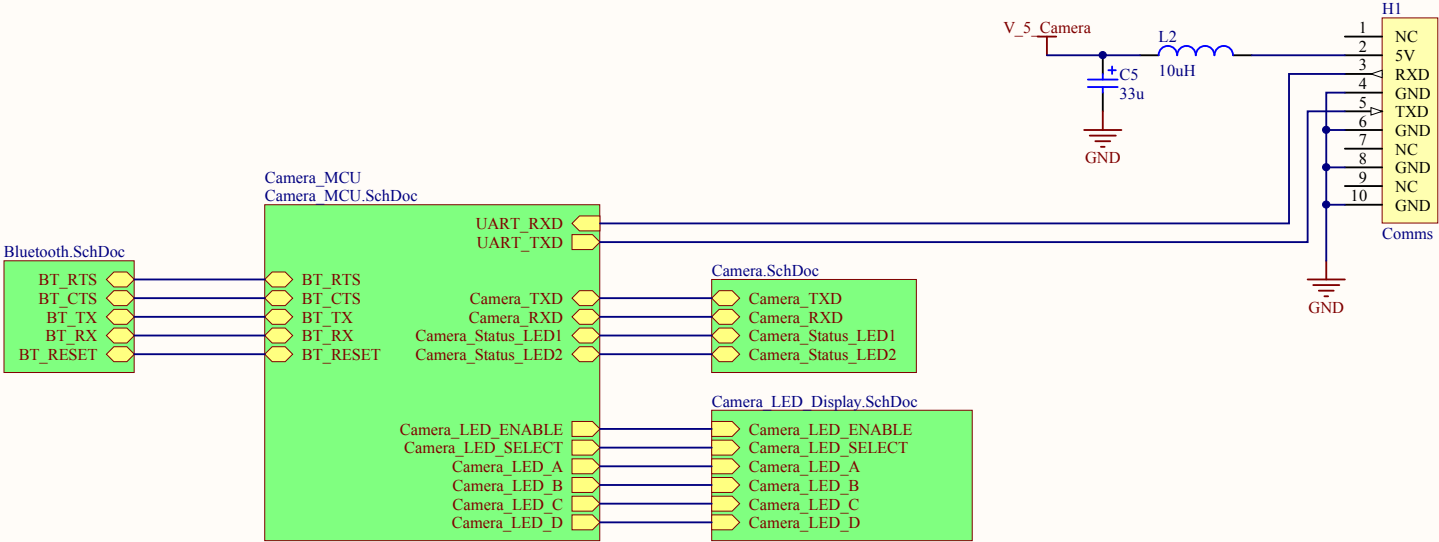
C

C

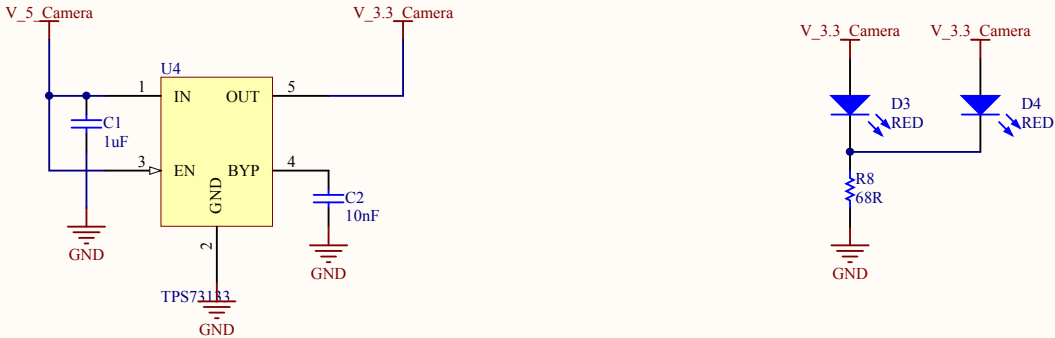
D


D

Board Communication and Power Header



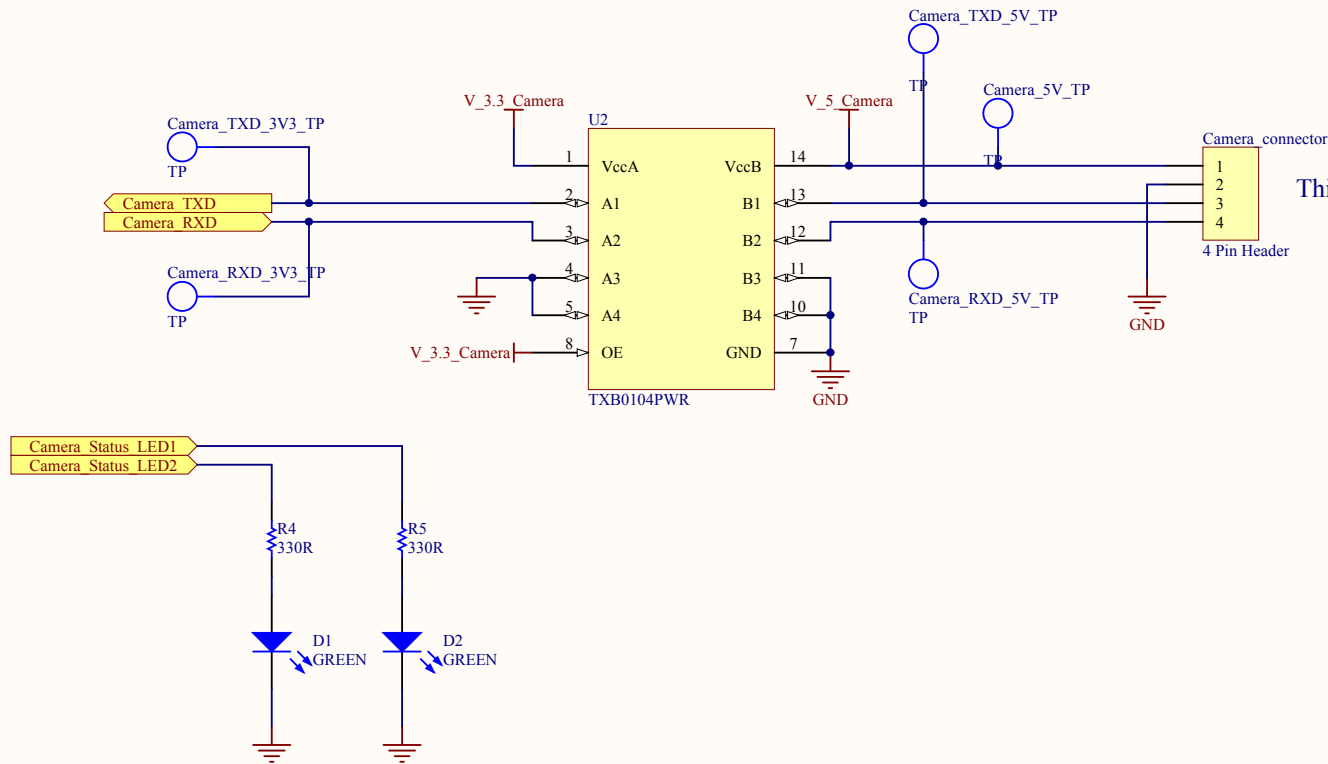
Camera Board Regulator



Title <i>Camera Board</i>			ENEL429 Group 9 ECE Department University of Canterbury Christchurch 8041 New Zealand		 UC UNIVERSITY OF CANTERBURY <i>To Whom Whānau e Whakarua</i> CHRISTCHURCH, NEW ZEALAND
Drawn bybyu17		Revision:1			
Date: 17/05/2011	Time: 1:53:51 a.m.	Sheet 1 of 4			
File: C:\Users\scr52\Desktop\enel429-2011-wackyracers-9\Altium\Schematics\Camera Board.SchDoc					

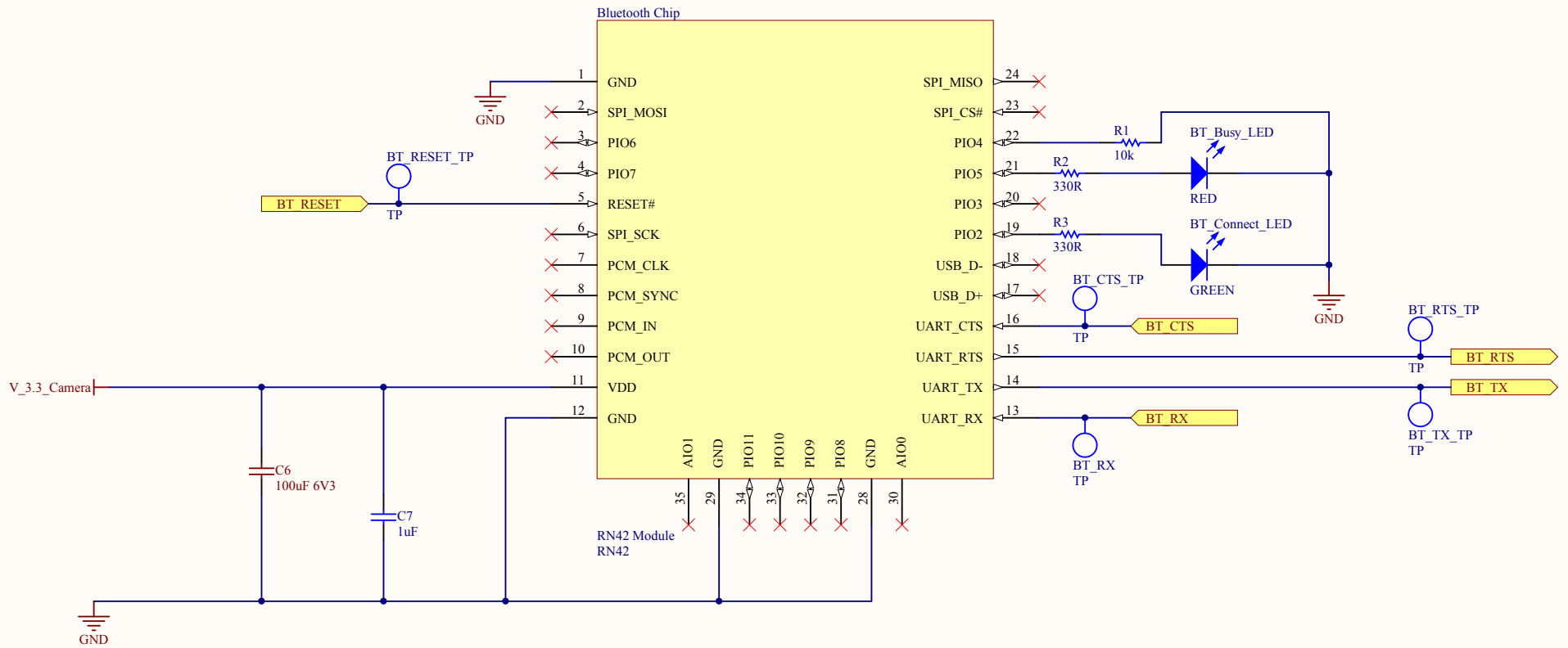


3V3 to 5V Level Shifter



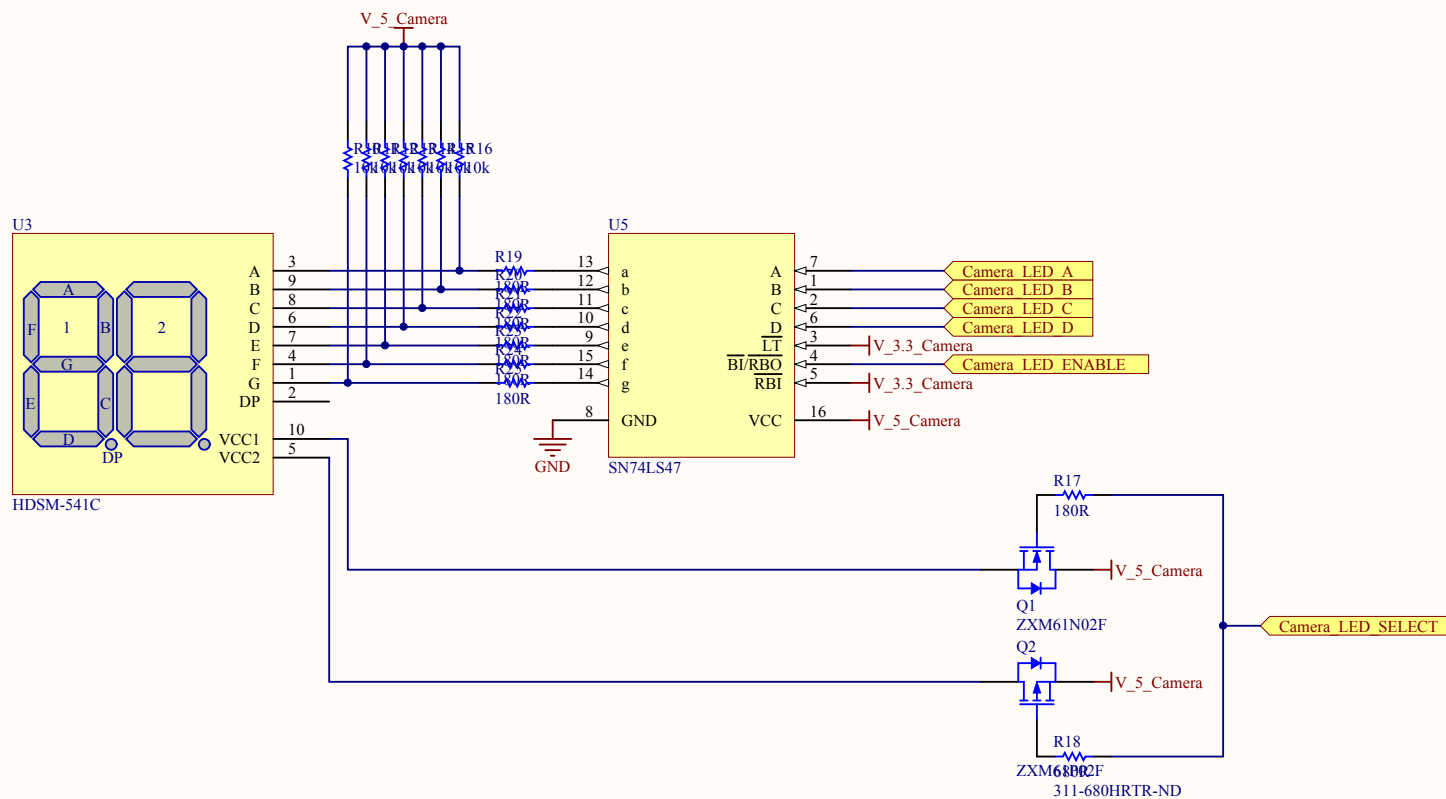
This connector connects to a SEN-10061 from Sparkfun.

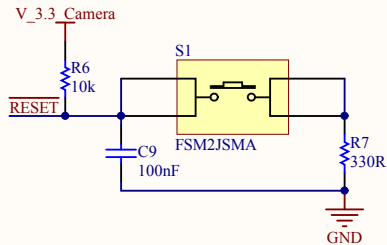
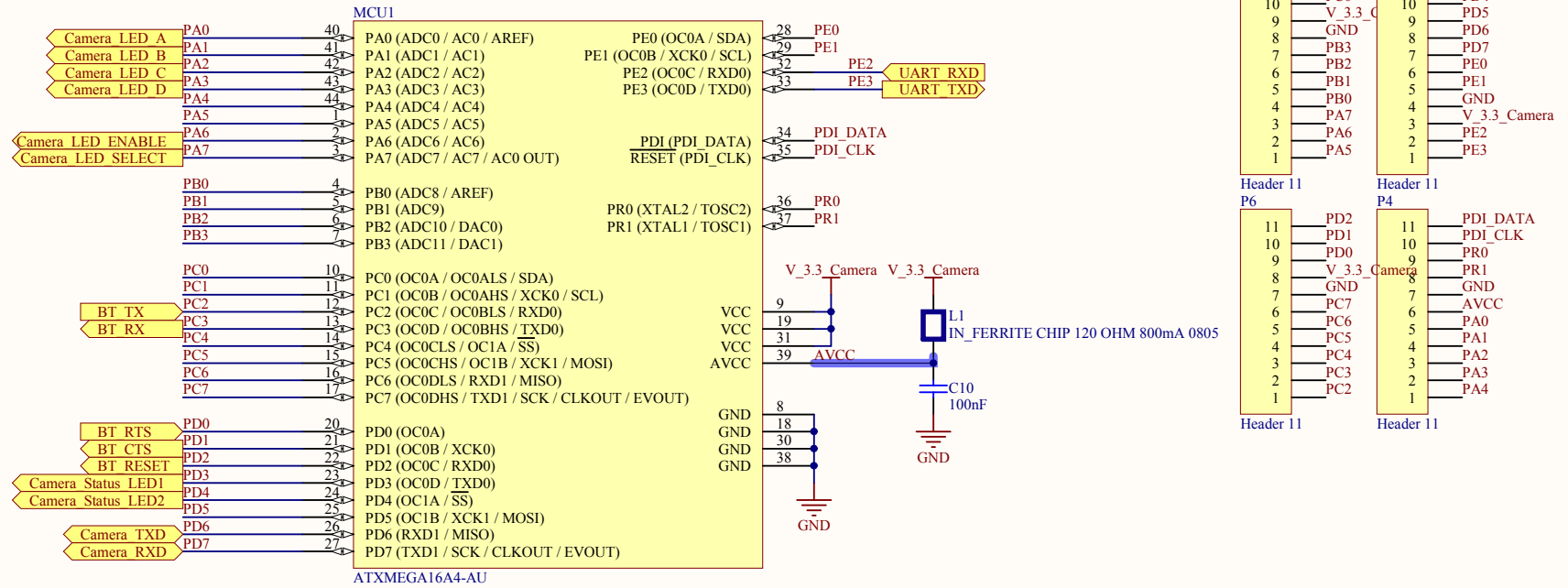
Title Camera Module		ENEL429 Group 9 ECE Department University of Canterbury Christchurch 8041 New Zealand
Drawn by byu17	Revision: 1	
Date: 17/05/2011	Time: 1:53:51 a.m.	Sheet 2 of 4
File: C:\Users\scr52\Desktop\enel429-2011-wackyracers-9\Altium\Schematics\Camera.SchDoc		



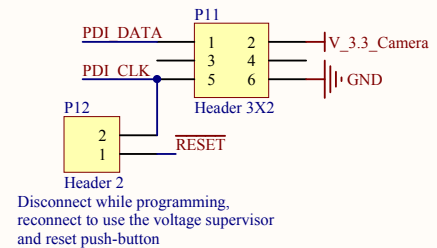
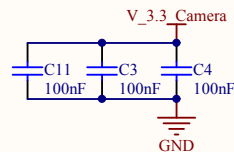
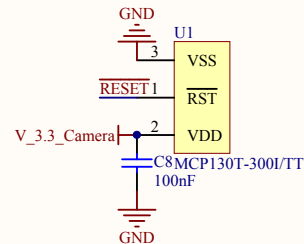
Title Bluetooth		ENEL429 Group 9 ECE Department University of Canterbury Christchurch 8041 New Zealand	
Drawn by: zjt14		Revision: 1	
Date: 17/05/2011	Time: 1:53:52 a.m.	Sheet 3	of 4
File: C:\Users\scr52\Desktop\enel429-2011-wackyracers-9\Altium\Schematics\Bluetooth.SchDoc			







Voltage Supervisor



Title **Camera Board MCU**

Drawn by byu17

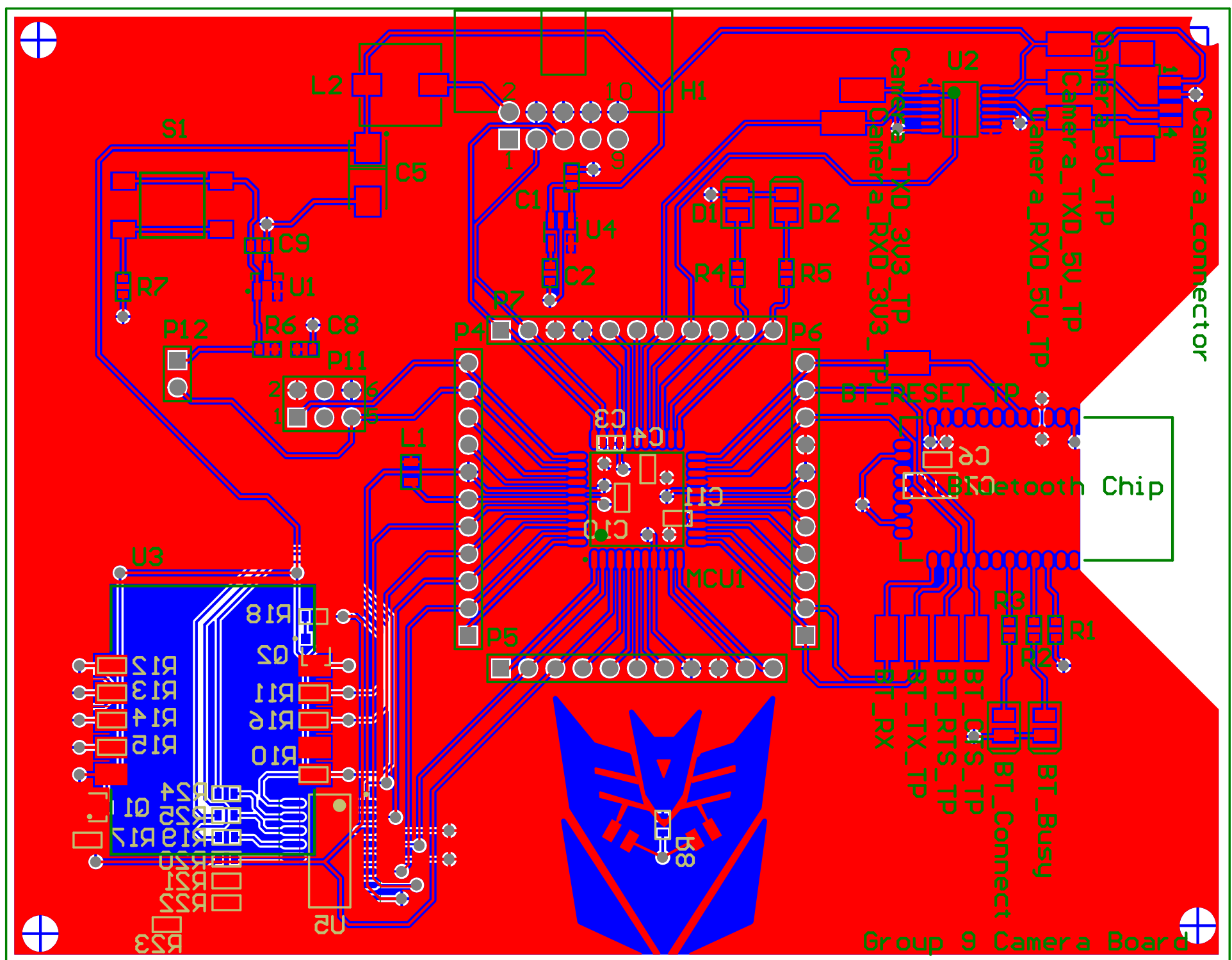
Revision: 1

Date: 17/05/2011 Time: 1:53:52 a.m. Sheet of

File: C:\Users\scr52\Desktop\enel429-2011-wackyacers-9\Altium\Schematics\Camera MCU.SchDoc

ENEL429 Group 9
ECE Department
University of Canterbury
Christchurch 8041
New Zealand





Bill of Materials

Camera Board

Source Data From: Camera_Board.PrjPcb
 Project: Camera_Board.PrjPcb
 Variant: None

Creation Date: 17/05/2011 1:54:05 a.m.
 Print Date: 40680 40680.07929

Footprint	Comment	LibRef	Designator	Description	Quantity
Diode_0805	LED Red	DL_LED Red 0805	BT_Busy_LED, D3, D4	Red LED 0805	3
DIODE_0805	LED Green	DL_LED Green 0805	BT_Connect_LED, D1, D2	Green LED 0805	3
0603	1uF	CP_1uF_50V_0603	C1, C7	CAP CER 1.0UF 50V X7R 0603	2
0603	10nF	CP_10nF 0603	C2	CAP CER 10000PF 100V X7R 0603	1
0603	100nF	CP_100nF 0603	C3, C4, C8, C9, C10, C11	CAP CER .10UF 50V X5R 0603	6
6032	CP_TANT_33uF	CP_TANT_33UF_20V	C5	CAP TANT 33UF 20V 10% SMD	1
1206	100uF 6V3	CP_CER 100uF_1206_6V3	C6	100uF 6.3V 1206 multi-layer ceramic capacitor	1
CONN_4X1_SMT_RA_1.25MM	4 Pin Header	JP_4PIN HDR_SMT_RA_MOLEX_1	Camera_connector	CONN HDR VERT 4POS .100" SNGL	1
918510x3230805	Comms	Header 10	H1	Header, IDC 10-Pin	1
	IN_FERRITE CHIP 120 OHM 800mA 0805	IN_FERRITE CHIP 120 OHM 800mA 0805	L1	FERRITE CHIP 120 OHM 800mA 0805	1
WE-PD	10uH	IN_10uH 2A SMT	L2	INDUCTOR POWER 10UH 2.0A SMD	1
TQFP80P1200X1200X120-44N	ATXMEGA16A4-AU	ATXMEGA16A4-AU	MCU1		1
HDR1X11	Header 11	Header 11	P4, P5, P6, P7	Header, 11-Pin	4
HDR2X3	Header 3X2	Header 3X2	P11	Header, 3-Pin, Dual row	1
HDR1X2	Header 2	Header 2	P12	Header, 2-Pin	1
SOT-23	ZXM61N02F	TF_ZXM61N02F	Q1	20V N-channel enhancement mode MOSFET	1
SOT23	ZXM61P02F	TF_ZXM61P02F	Q2	20V P-channel enhancement mode MOSFET	1
0603	10k	RS_10k 0603	R1, R6, R10, R11, R12, R13, R14, R15, R16	RES 10.0K OHM 1/10W 1% 0603 SMD	9
0603	330R	RS_330R 0603	R2, R3, R4, R5, R7	RES 330 OHM 1/10W 1% 0603 SMD	5
0603	68R	RS_68R 0603	R8	RES 68 OHM 1/10W 1% 0603 SMD	1
0603	180R	RS_180R 0603	R17, R19, R20, R21, R22, R23, R24, R25	RES 180OHM 1/10W 1% 0603 SMD	8
0603	680R	RS_680R 0603	R18	RES 680 OHM 1/10W 1% 0603 SMD	1
FSM2JSMA	FSM2JSMA	SW_FSM2JSM A	S1	DPST SMD Switch	1
SOT-23-TT3_N	MCP130T-300/TT	MCP130T-300/TT	U1	Microcontroller Supervisory Circuit with Open Drain Output, 3-Pin SOT-23, Industrial Temperature, Tape and Reel	1
TSSOP-14_PW	IC_TXB0104PWR	IC_TXB0104PWR	U2	IC VOLT-LEVEL TRANSLATOR 14TSSOP	1
HDSM-541C DBV005	HDSM-541C TPS73133	HDSM-541C IC_TPS73133	U3	2 character 7 segment display	1
			U4	150mA 3.3V linear regulator with 30mV dropout	1
SOP127P780X200-16N	SN74LS47	SN74LS47	U5	SN74LS47	1
					60

Approved	Notes