











Title Auto Bike Controller Expansion Board		
Size A4	Number 01	Revision 02
Date: 31/07/2014	Sheet 1 of 2	
File: C:\SUTD\AutoBikeRev3Sh2.SchDoc	Drawn By: Brandon E. Walton	

Comment	Description	Designator	Footprint	LibRef	Quantity
Cap Semi	Capacitor (Semiconductor SIM Model)	C1, C3, C4, C5, C8, C9, C11, C12, C14, C16, C17, C18, C20, C21	1608[0603]	Cap Semi	14
Cap Pol3	Polarized Capacitor (Surface Mount)	C6, C10, C13	1812	Cap Pol3	3
Cap Pol3	Polarized Capacitor (Surface Mount)	C15	C0805	Cap Pol3	1
DB2430100L		D1	DB2430100L	DB2430100L	1
RECOM_DCDC		DCDC1	RECOM_1.5A_12V_5V	RECOM_DCDC	1
BTN7960		DRV1, DRV4	BTN7960	BTN7960	2
MC33932VW		DRV2, DRV5	SOP65P1420X340_HS-45MNH	MC33932VW	2
Beagle Header P8		HDR1	46PinHeader	BeagleHeaderP8	1
BeagleHeaderP9		HDR2	46PinHeader	BeagleHeaderP9	1
Molex_MLX_9Pin_Vertical		HDR3	Molex_MLX_9Pin_Vertical	Molex_MLX_9Pin_Vertical	1
MLX_0010844020		HDR4	MLX_0010844020	MLX_0010844020	1
USB		HDR5	USB	USB	1
Molex_iGrid_40Pin_Vertical		HDR6	MOLEX_iGrid_40Pin_Vertical	Molex_iGrid_40Pin_Vertical	1
Header 5	Header, 5-Pin	HDR7	HDR1X5	Header 5	1
TX		LED1	RESC1608L	LED	1
RX		LED2	RESC1608L	LED	1
12V		LED3	RESC1608L	LED	1
5V0		LED4	RESC1608L	LED	1
3V3		LED5	RESC1608L	LED	1
MOSFET-P	P-Channel MOSFET	Q1	SOT23_N	MOSFET-P	1
MOSFET-N	N-Channel MOSFET	Q6	E3	MOSFET-N	1
Res3	Resistor	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20	J1-0603	Res3	20
PIC16F1826T-I/SS	Flash Microcontroller with nanoWatt XLP Technology, 32 MHz, 15 I/O, -40 to 85 degC, 20-pin SSOP (SS20), Tape and Reel	U1	MCHP-SSOP-SS20_N	PIC16F1826T-I/SS	1
FT230XS-U	USB to Basic UART Inter	U2	SSOP-16_N	FT230XS-U	1