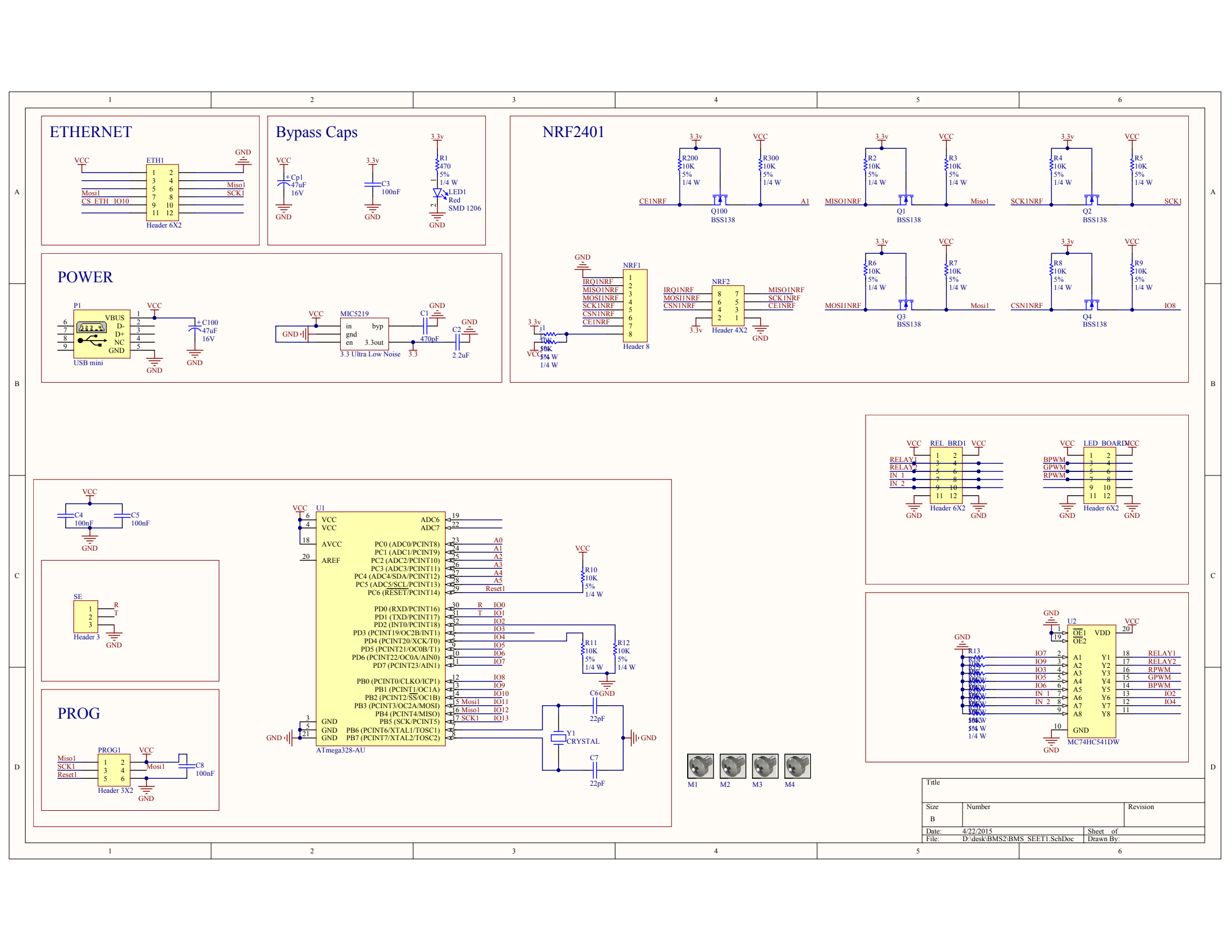
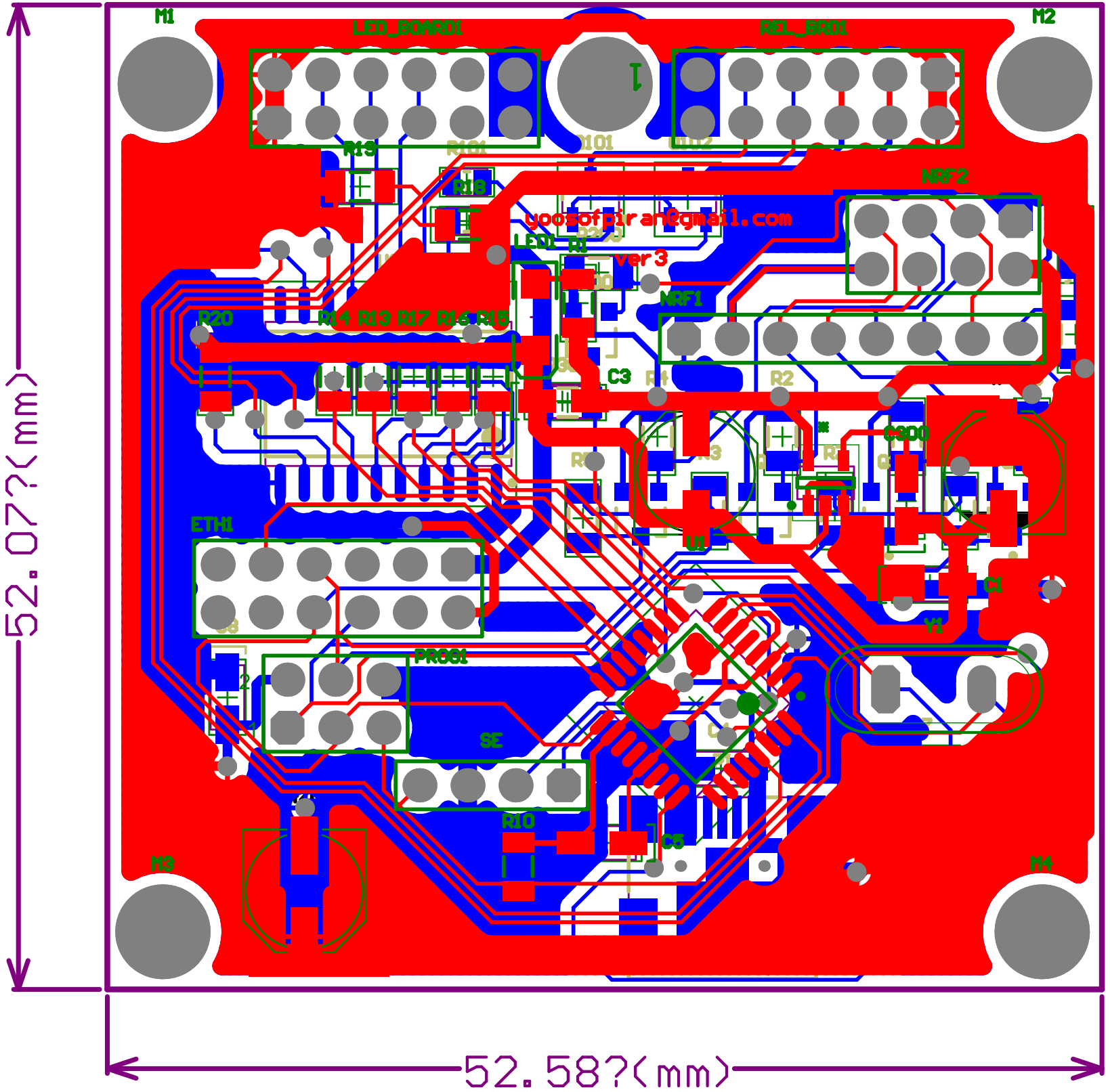

ETHERNET
VCC
ETH1
GND
Mosi1
CS_ETH
IO10
Miso1
SCK1
Header 6X2
Bypass Caps
VCC
Cp1
47uF
16V
GND
3.3v
C3
100nF
R1
470
5%
1/4 W
LED1
Red
SMD 1206
NRF2401
3.3v
R200
10K
5%
1/4 W
CE1NRF
Q100
BSS138
R300
A1
R2
MISO1NRF
Q1
Miso1
R3
SCK1NRF
Q2
SCK1
R4
R5
R6
MOSI1NRF
Q3
Mosi1
R7
R8
CSN1NRF
Q4
IO8
R9
NRF1
IRQ1NRF
MISO1NRF
MOSI1NRF
SCK1NRF
CSN1NRF
CE1NRF
Header 8
j1
Header 4X2
POWER
P1
VBUS
D-
D+
NC
GND
USB mini
C100
47uF
16V
MIC5219
in
gnd
en
byp
3.3out
3.3 Ultra Low Noise
C1
470pF
C2
2.2uF
3.3
REL_BRD1
RELAY1
RELAY2
IN_1
IN_2
Header 6X2
LED_BOARD1
BPWM
GPWM
RPWM
C4
100nF
C5
100nF
SE
R
T
Header 3
U1
ATmega328-AU
ADC6
ADC7
AVCC
AREF
PC0 (ADC0/PCINT8)
PC1 (ADC1/PCINT9)
PC2 (ADC2/PCINT10)
PC3 (ADC3/PCINT11)
PC4 (ADC4/SDA/PCINT12)
PC5 (ADC5/SCL/PCINT13)
PC6 (RESET/PCINT14)
Reset1
R10
10K
PD0 (RXD/PCINT16)
PD1 (TXD/PCINT17)
PD2 (INT0/PCINT18)
PD3 (PCINT19/OC2B/INT1)
PD4 (PCINT20/XCK/T0)
PD5 (PCINT21/OC0B/T1)
PD6 (PCINT22/OC0A/AIN0)
PD7 (PCINT23/AIN1)
R11
R12
PB0 (PCINT0/CLKO/ICP1)
PB1 (PCINT1/OC1A)
PB2 (PCINT2/SS/OC1B)
PB3 (PCINT3/OC2A/MOSI)
PB4 (PCINT4/MISO)
PB5 (SCK/PCINT5)
PB6 (PCINT6/XTAL1/TOSC1)
PB7 (PCINT7/XTAL2/TOSC2)
C6
22pF
Y1
CRYSTAL
C7
22pF
PROG
PROG1
Miso1
SCK1
Reset1
Mosi1
C8
100nF
Header 3X2
U2
OE1
OE2
VDD
GND
MC74HC541DW
M1
M2
M3
M4
Title
Size
B
Number
Revision
Date:
4/22/2015
File:
D:\desk\BMS2\BMS_SEET1.SchDoc
Sheet of
Drawn By:



M1
M2
M3
M4
LED_BOARD1
REL_BRD1
R13
R101
D101
D102
R18
NRF2
yoosofpiran@gmail.com
LED1
R1
ver3
NRF1
R20
R14 R13 R17 R16 R15
C3
R4
R2
R3
R7
Q1
ETH1
U1
C1
Y1
PROG1
SE
R10
C5
52.07?(mm)
52.58?(mm)

Bill of Materials

<Parameter Title not found>

Source Data From: PCB_Project_BMS.PrjPcb

Project: PCB_Project_BMS.PrjPcb

Variant: None

Creation Date: 4/22/2015 2:23:46 AM

Print Date: 42116 42116.09996

Footprint	Comment	LibRef	Designator	Description	Quantity
SMD_CAP_0805	470pF	Cap-Bipolar	C1	Bipolar Capacitor	1
SMD_CAP_1206	2.2uF	Cap-Bipolar	C2	Bipolar Capacitor	1
CAPP 1206 (3216X18L) Size A	100nF	Cap-Bipolar	C3, C4, C5, C8	Bipolar Capacitor	4
CAPP 1206 (3216X18L) Size A	22pF	Cap-Bipolar	C6, C7	Bipolar Capacitor	2
CAPP 1206 (3216X18L) Size A	47uF	Cap-Polar	C100, Cp1	Polar Capacitor	2
HDR2X6	Header 6X2	Header 6X2	ETH1, LED_BOARD1, REL_BRD1	Header, 6-Pin, Dual row	3
RES 1206 (3216X08L)	10K	Resistor	j1, j2, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R200, R300	Resistor	23
LED SMD 1206	Red	LED	LED1	LED	1
Board Screw_No Silk	Screw	Board Screw	M1, M2, M3, M4	Board Screw With Spacer	4
mic5205	3.3 Ultra Low Noise	Component_1	MIC5219		1
HDR1X8	Header 8	Header 8	NRF1	Header, 8-Pin	1
HDR2X4	Header 4X2	Header 4X2	NRF2	Header, 4-Pin, Dual row	1
USB/SM0.8-6H5	USB mini	USB mini	P1	mini USB Connector	1
HDR2X3	Header 3X2	Header 3X2	PROG1	Header, 3-Pin, Dual row	1
SOT23	BSS138	BSS138	Q1, Q2, Q3, Q4, Q100	N-Channel Enhancement Mode Vertical DMOS FET	5
RES 1206 (3216X08L)	470	Resistor	R1	Resistor	1
HDR1X3	Header 3	Header 3	SE	Header, 3-Pin	1
32A_N	ATmega328-AU	ATmega328-AU	U1	8-bit AVR Microcontroller, 32KB Flash, 1KB EEPROM, 2KB SRAM, 32-pin TQFP, Industrial Grade (-40°C to 85°C)	1
751D-03_N	MC74HC541DW	MC74HC541DW	U2	Octal 3-State Non-Inverting Buffer/Line Driver/Line Receiver	1
My_Crystal	CRYSTAL	CRYSTAL	Y1	Crystal	1
					56

Approved	Notes	