







Title <b>Dev_Board</b>				
Size: A3	Number: *	Revision: v1_0		
Date: 02/05/2022	Eng: Nethshan	Sheet 2 of 2		
File: D:\Abheetha\Dev Board_v1_0\Dev Board_1.SchDoc				

Comment	Description	Designator	LibRef	Quantity	Value
Motor	Servo Motor	B1	Motor Servo	1	
Buzzer_5V	Buzzer_5V	BZ1	Buzzer_5V	1	
Cap	Capacitor	C1, C2, C3, C4, C5, C6	Cap	6	0.1uF
Diode 1N4001	1 Amp General Purpose Rectifier	D2	Diode 1N4001	1	
Diode 1N5400	3 Amp General Purpose Rectifier	D3	Diode 1N5400	1	
Dpy Blue-CA	14.2 mm General Purpose Blue 7-Segment Display: CA, RH DP, Gray Surface	DS1	Dpy Blue-CA	1	
RLED	LED RED RADIAL	DS3, DS6, DS7, DS8, DS9, DS10, DS11, DS12, DS13, DS14	LED_IR	10	LED RED
ALED	LED RED RADIAL	DS4	LED_IR	1	LED RED
GLED	LED RED RADIAL	DS5	LED_IR	1	LED RED
LED IR	LED IR 5mm EMITTER IR 940NM 100MA RADIAL	DS15	LED_IR	1	TSAL6100
PEC11R-4215F-S0024	Rotary Encoder Mechanical 24 Quadrature _Incremental_Vertical	ENC1	PEC11R-4215F-S0024	1	
Keypad 4X4 Matrix	Keypad 4X4 Matrix	KY1	Keypad 4X4 Matrix	1	
16 x 2 Character LCD	16 x 2 Character LCD 1602A	LCD1	LCD_16x2_1602A	1	
PhotCell	Phot Cell - LDR	LR1	Photo Cell (LDR)	1	
Header 3	Header, 3-Pin	P1, P12	Header 3	2	
Header 4	Header, 4-Pin	P2	Header 4	1	
Header 8	Header, 8-Pin	P3, P5, P6	Header 8	3	
Header 10	Header, 10-Pin	P4	Header 10	1	
Header 6	Header, 6-Pin	P7	Header 6	1	
Header 8H	Header, 8-Pin, Right Angle	P8	Header 8H	1	
TB-RC	TERMINAL BLOCK 5.08MM 2POS PCB Rising Clamp	P9, P10	TB-2_Rising Clamp	2	
Header 2	Header, 2-Pin	P11	Header 2	1	
Photo NPN	NPN Phototransistor	Q1	Photo NPN	1	
IRF540N	N-Channel Power MOSFET	Q2	NMOS-2	1	
2N3904	NPN General Purpose Amplifier	Q3	2N3904	1	
RPot	Potentiometer	R1	RPot	1	10K
Res Semi	Semiconductor Resistor	R2, R3, R4, R5, R6, R7, R8, R9	Res Semi	8	1K
Res Semi	Semiconductor Resistor	R10, R11, R12, R13, R14, R15, R16, R17, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R48, R50	Res Semi	23	10K
Res Semi	Semiconductor Resistor	R18, R20, R21, R22, R39, R40, R41, R42, R43, R44, R45, R46, R47	Res Semi	13	330R
Res Semi	Semiconductor Resistor	R19, R49	Res Semi	2	100R
Res Semi	Semiconductor Resistor	R51	Res Semi	1	56K
SW-PB_12x12	SWITCH TACTILE SPST-NO 0.05A 12V 12x12	S1, S2	SW-PB_12x12	2	
Plug	Plug	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8	Plug	8	
MC74HC595AN	8-Bit Serial-Input/Serial or Prallel-Output Shift Register with Latched 3-State Outputs	U1	MC74HC595AN	1	
MCP23017-E/SP	16-Bit I/O Expander	U2	MCP23017-E/SP	1	