
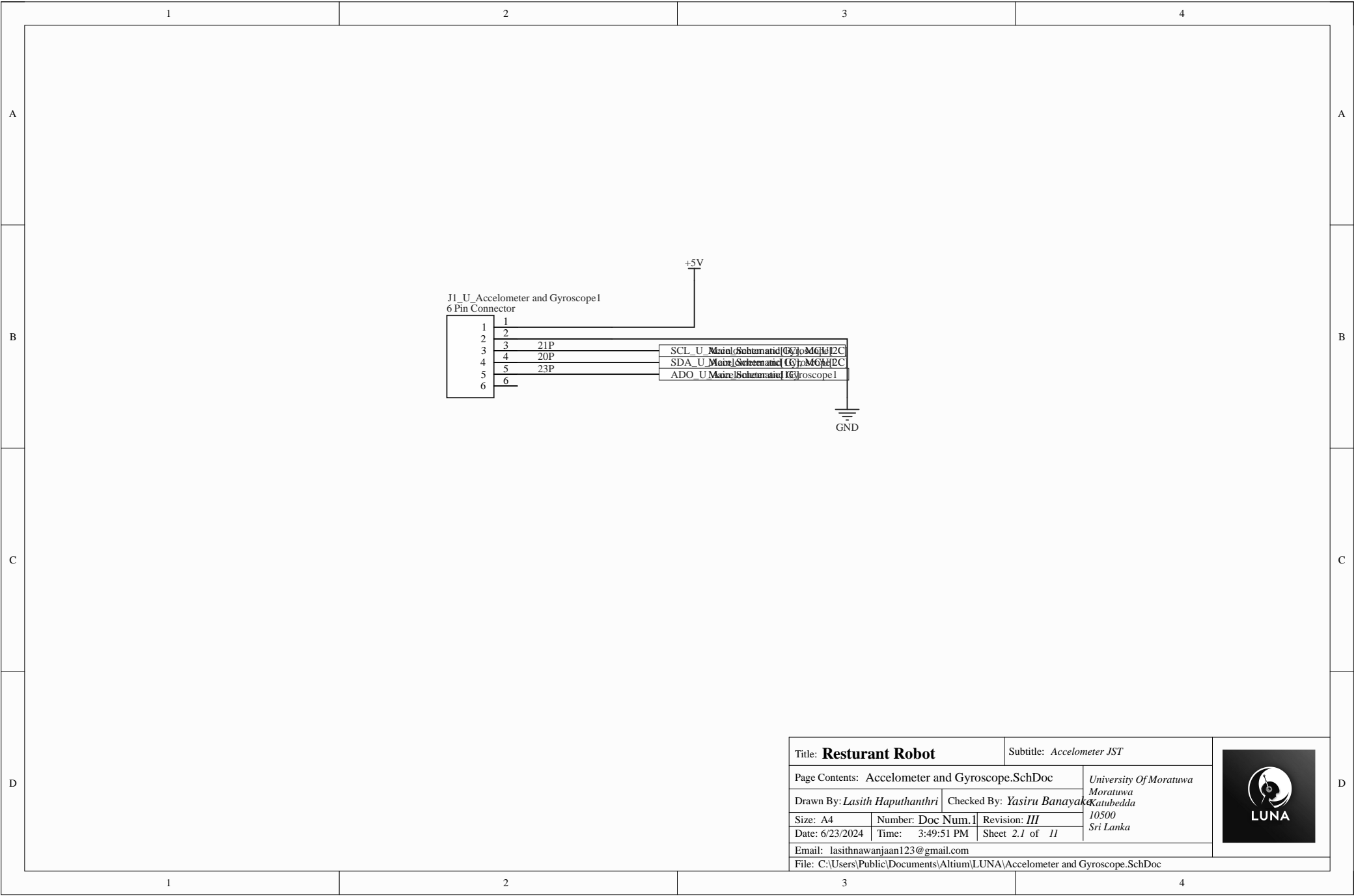
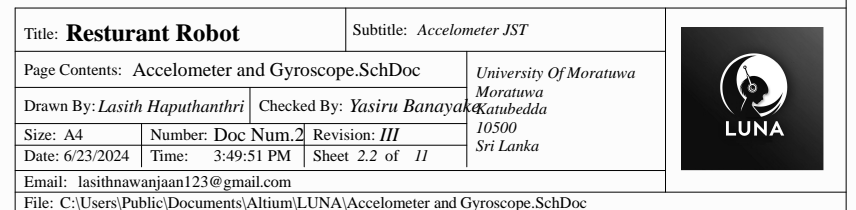
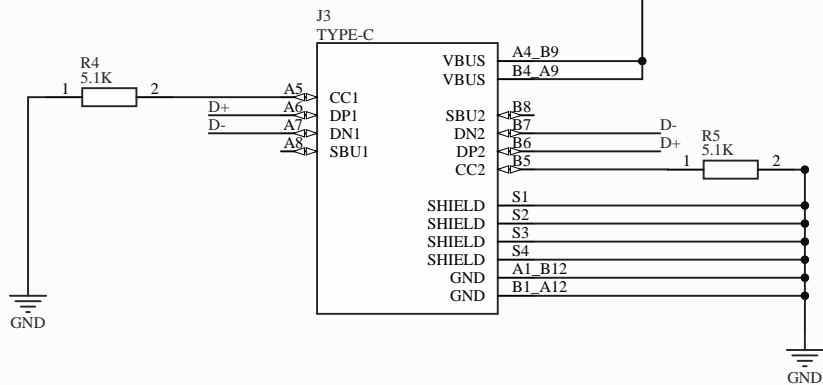
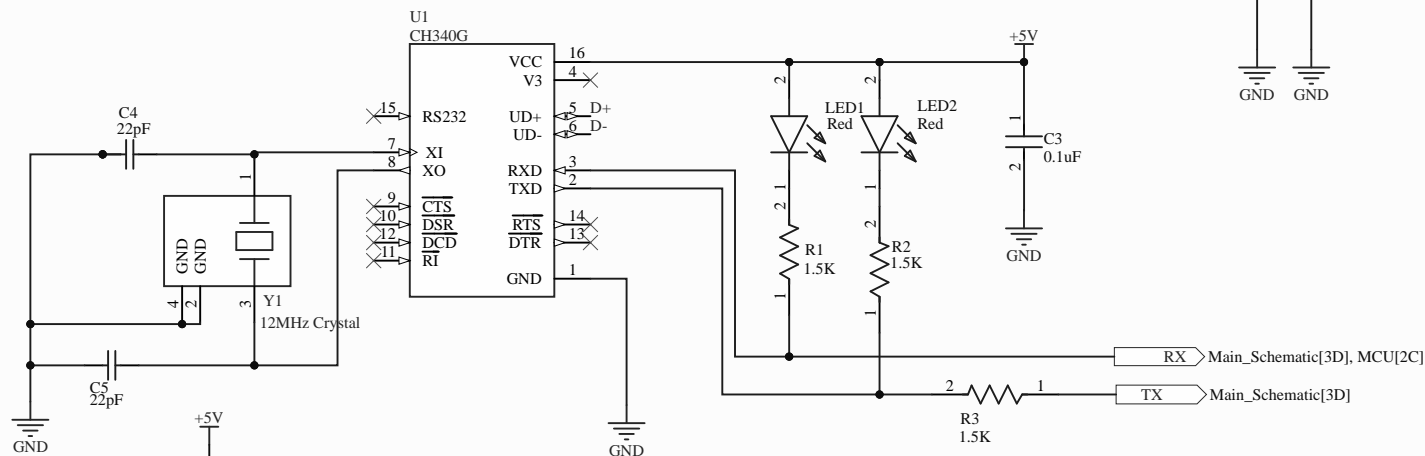
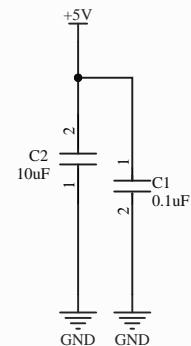
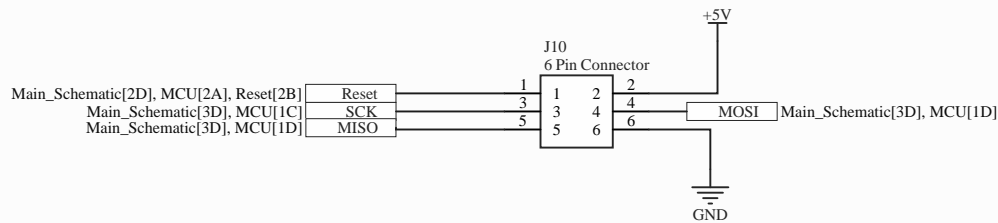



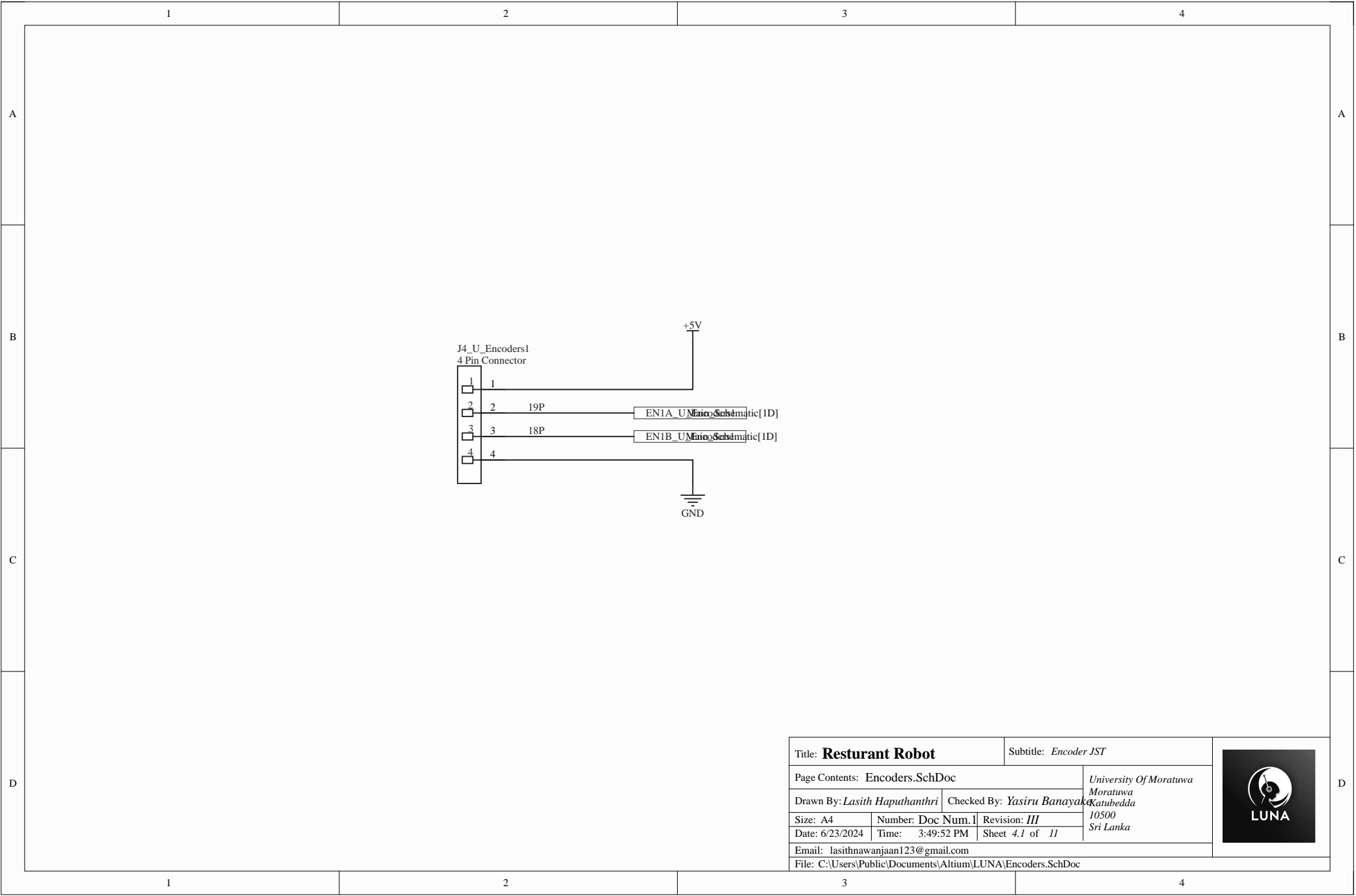
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Page Contents: <b>Main_Schematic.SchDoc</b>					<i>University Of Moratuwa</i>		
Drawn By: <i>Lasith Haputhanthri</i>			Checked By: <i>Yasiru Banayaka</i>				<i>Moratuwa</i>
							<i>Katubedda</i>
Size: A4		Number: <b>I.</b>		Revision: <i>III</i>			<i>10500</i>
Date: 6/23/2024	Time: 3:49:51 PM		Sheet 1 of 11		<i>Sri Lanka</i>		
Email: lasithnawanjaan123@gmail.com							
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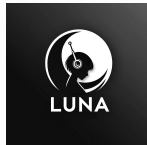


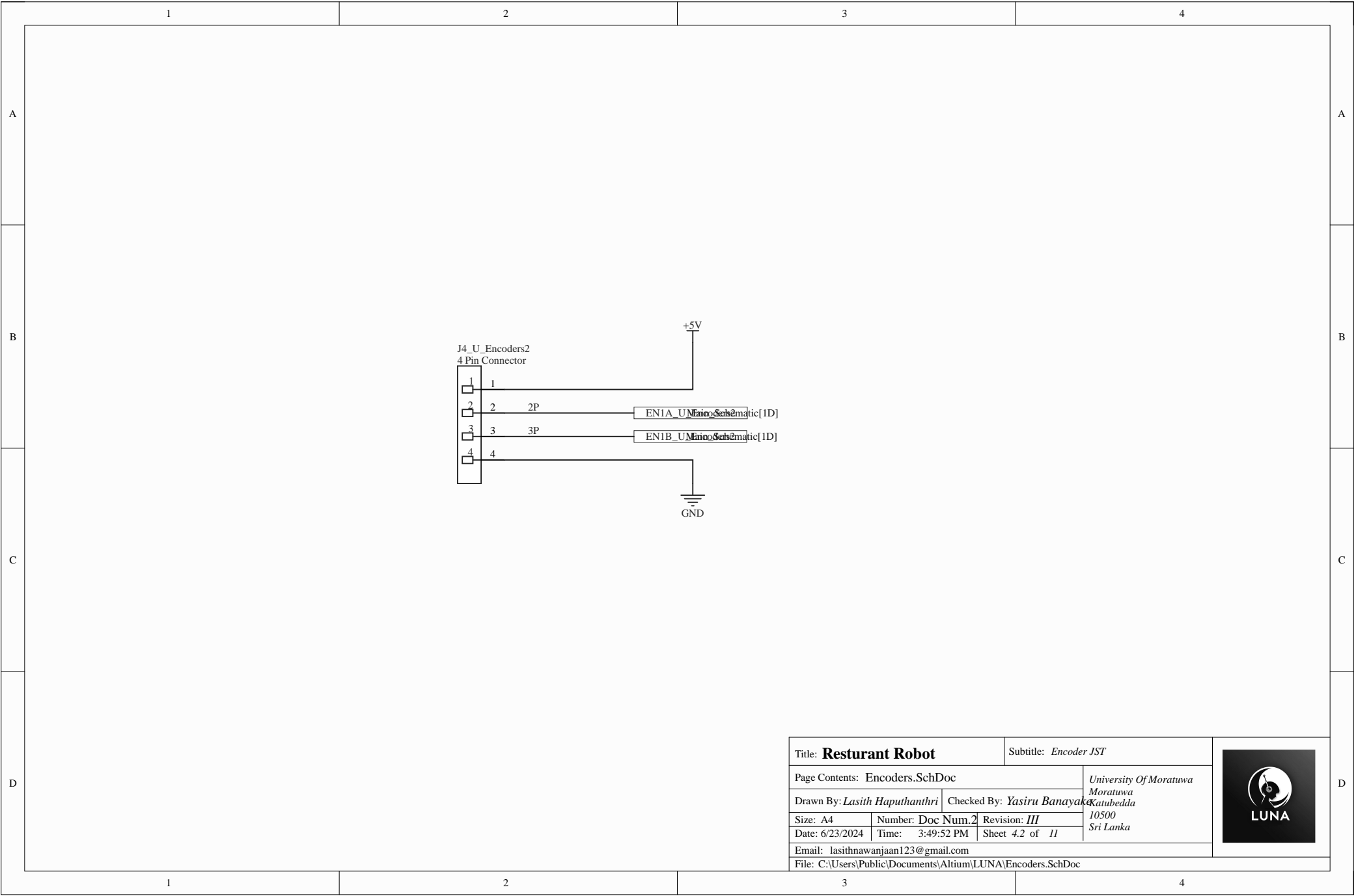


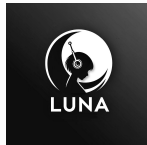


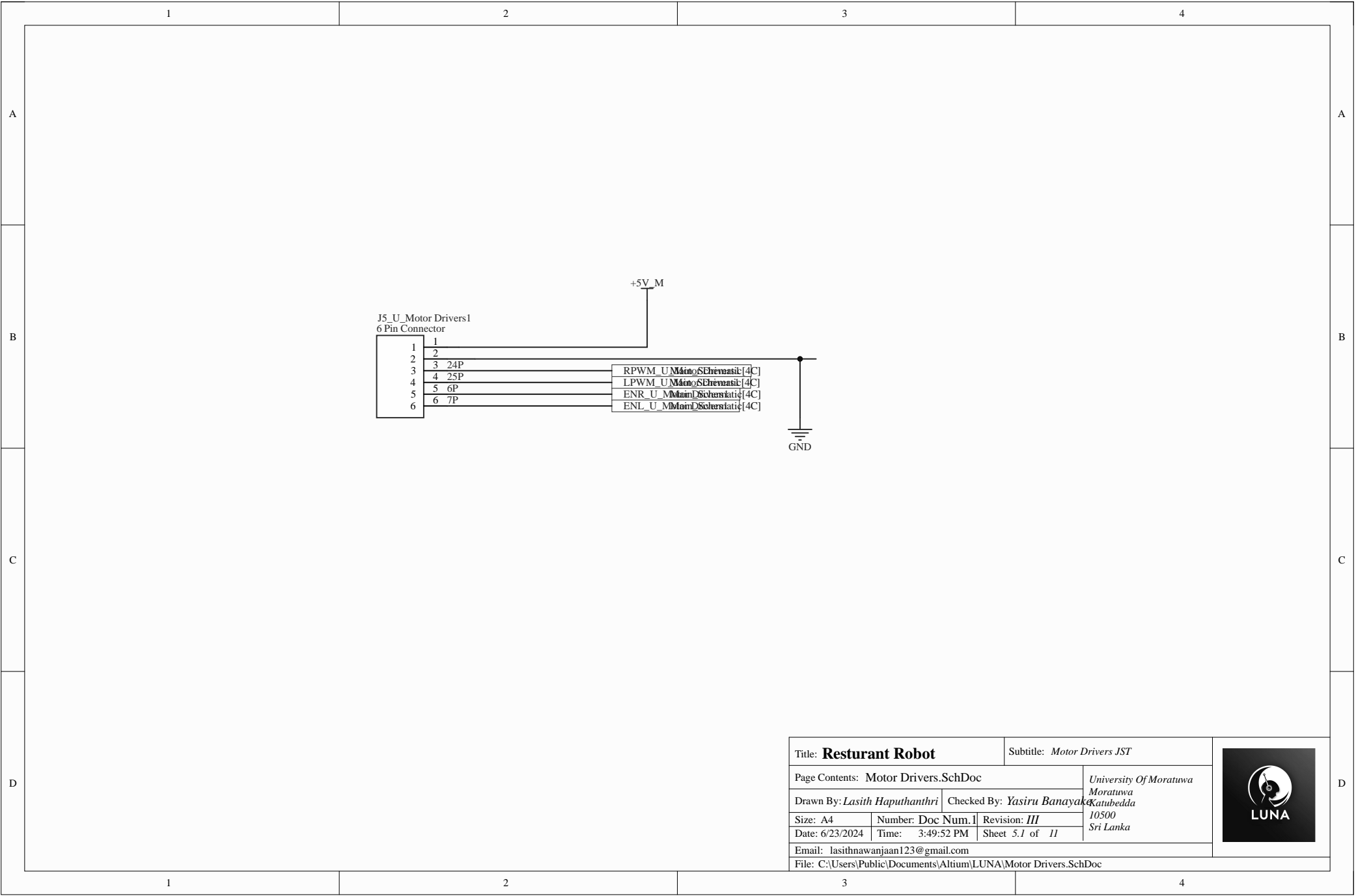
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Page Contents: Cording.SchDoc			<div>University Of Moratuwa Moratuwa Katubedda 10500 Sri Lanka</div> <div></div>				
Drawn By: <i>Lasith Haputhanthri</i>		Checked By: <i>Yasiru Banayaka</i>					
Size: A4	Number: Doc Num.	Revision: <i>III</i>					
Date: 6/23/2024	Time: 3:49:52 PM	Sheet 3 of 11					
Email: lasithnawanjaan123@gmail.com							
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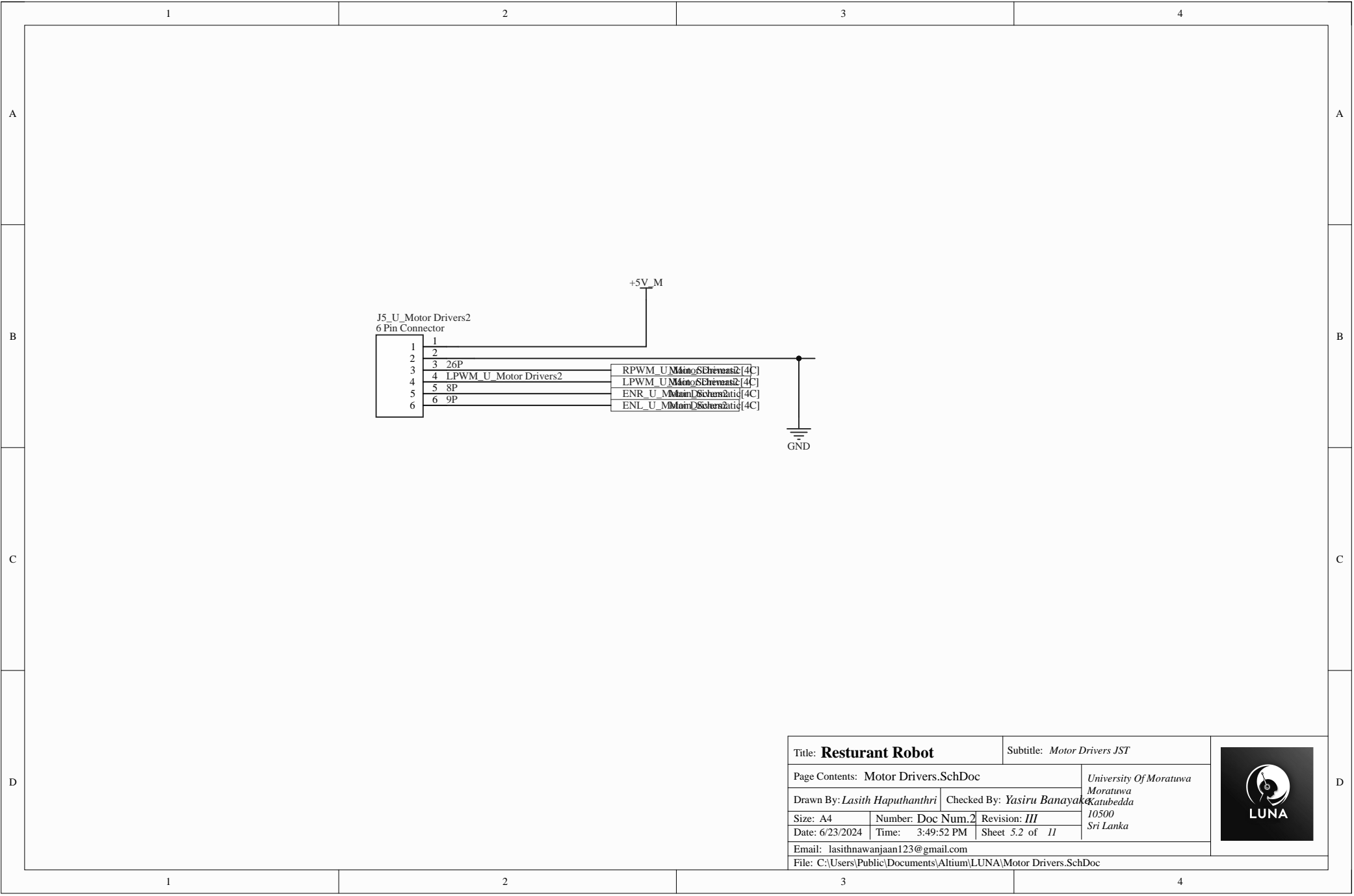


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Page Contents: Encoders.SchDoc				<i>University Of Moratuwa</i> <i>Moratuwa</i> <i>Katubedda</i> <i>10500</i> <i>Sri Lanka</i>	
Drawn By: <i>Lasith Haputhanthri</i>		Checked By: <i>Yasiru Banayaka</i>			
Size: A4	Number: Doc Num.1	Revision: <i>III</i>			
Date: 6/23/2024	Time: 3:49:52 PM	Sheet 4.1 of 11			
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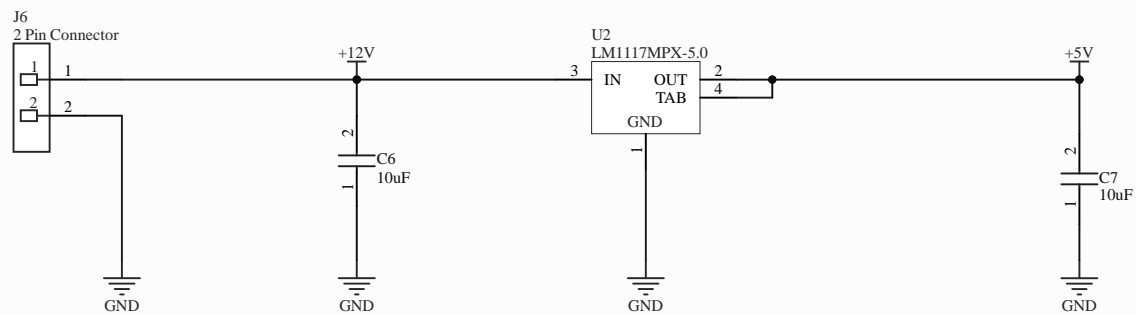



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Page Contents: Encoders.SchDoc				<div>University Of Moratuwa Moratuwa Katubedda 10500 Sri Lanka</div>	
Drawn By: <i>Lasith Haputhanthri</i>		Checked By: <i>Yasiru Banayaka</i>			
Size: A4	Number: Doc Num. 2	Revision: <i>III</i>			
Date: 6/23/2024	Time: 3:49:52 PM	Sheet 4.2 of 11			
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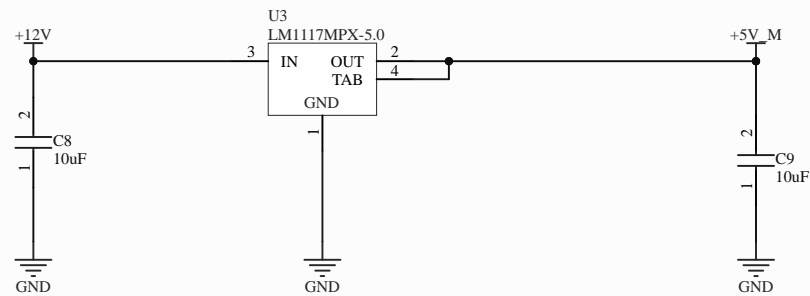


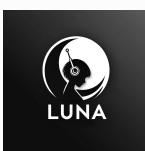


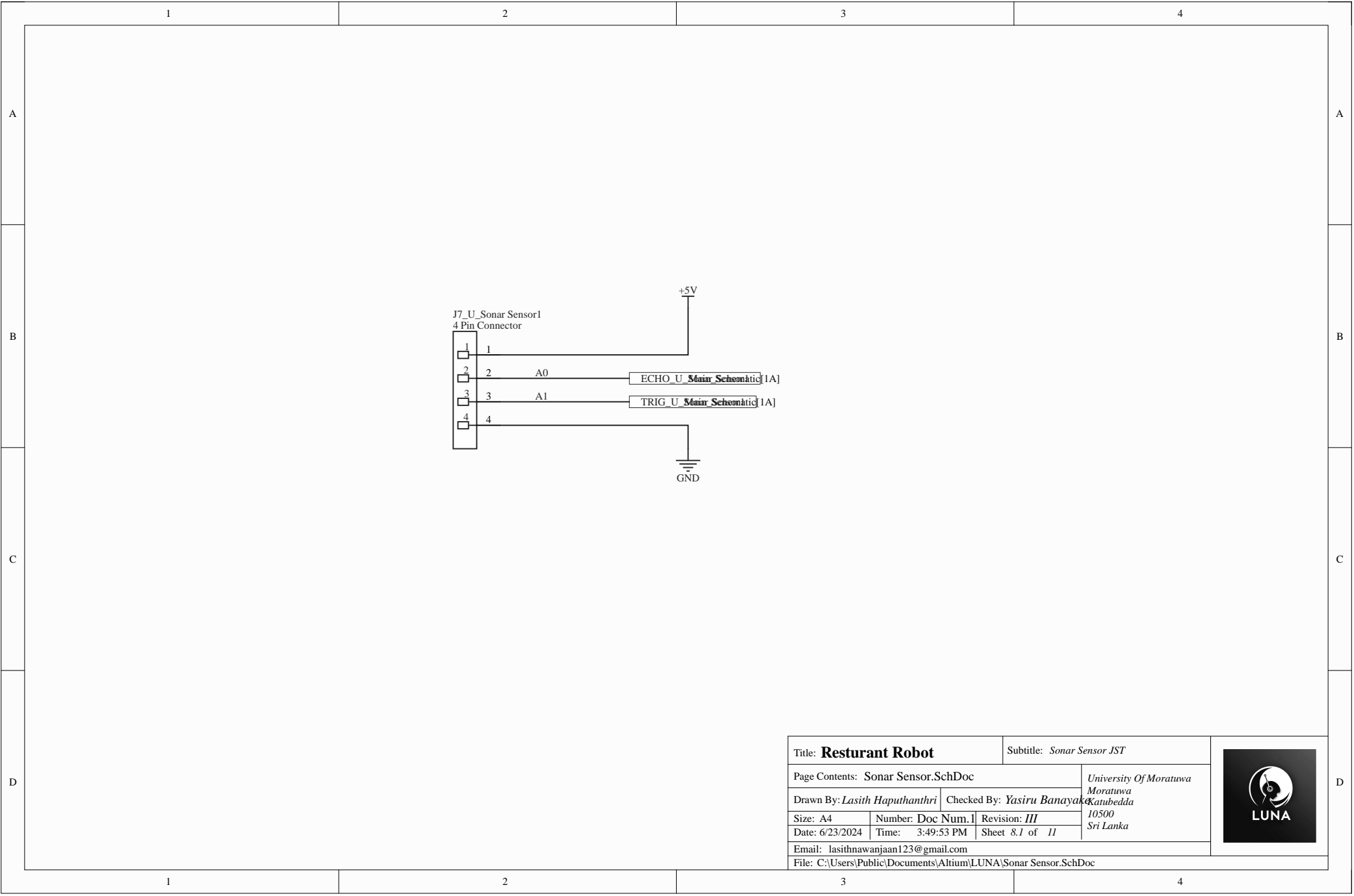





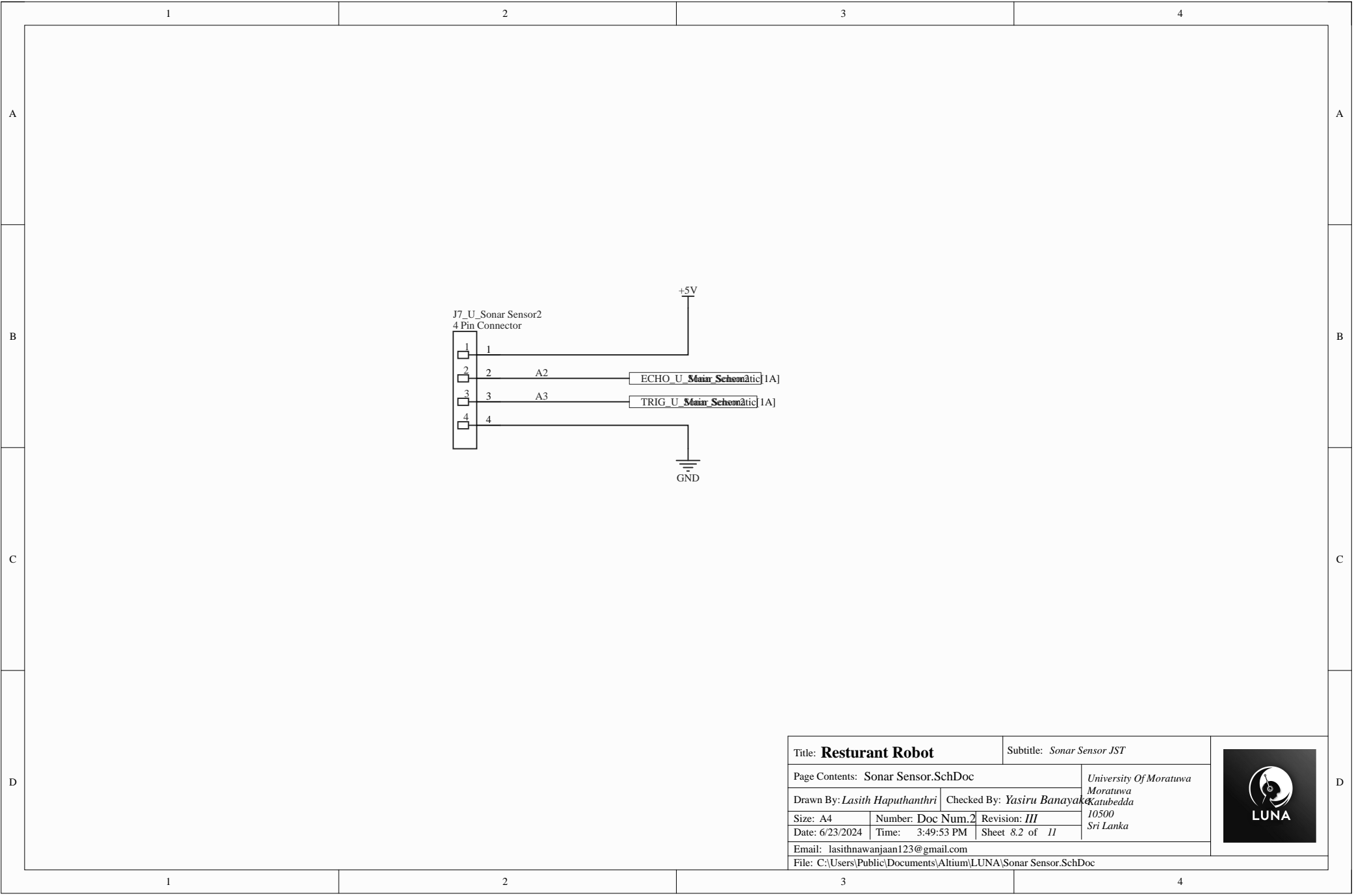
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Page Contents: PowerMCU.SchDoc			<div>University Of Moratuwa Moratuwa Katubedda 10500 Sri Lanka</div> 				
Drawn By: <i>Lasith Haputhanthri</i>		Checked By: <i>Yasiru Banayaka</i>					
Size: A4	Number: Doc Num.	Revision: <i>III</i>					
Date: 6/23/2024	Time: 3:49:53 PM	Sheet 6 of 11					
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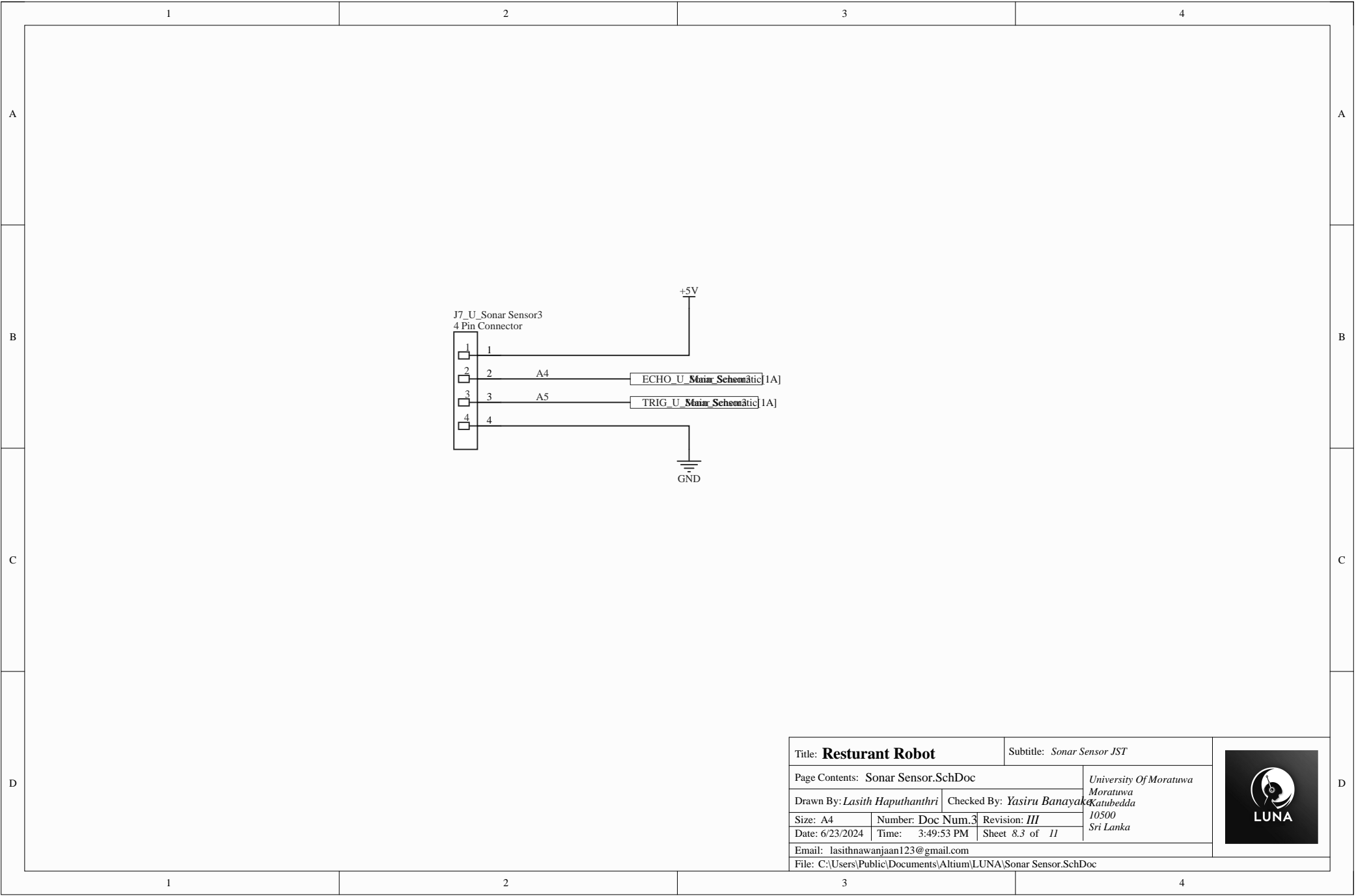


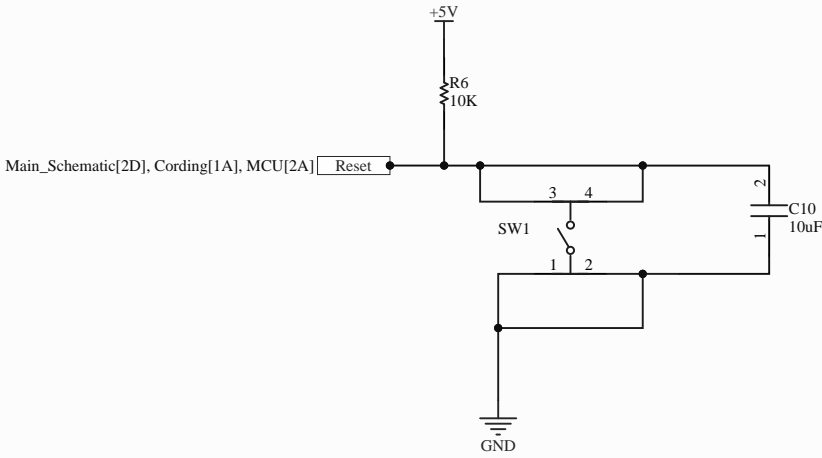
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Page Contents: Power_Supply_Motor.SchDoc				University Of Moratuwa		
Drawn By: <i>Lasith Haputhanthri</i>		Checked By: <i>Yasiru Banayaka</i>		Moratuwa		
Size: A4		Number: Doc Num.		Katubedda		
Date: 6/23/2024		Time: 3:49:53 PM		10500		
		Sheet 7 of 11		Sri Lanka		
Email: lasithnawanjaan123@gmail.com						
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3			4			



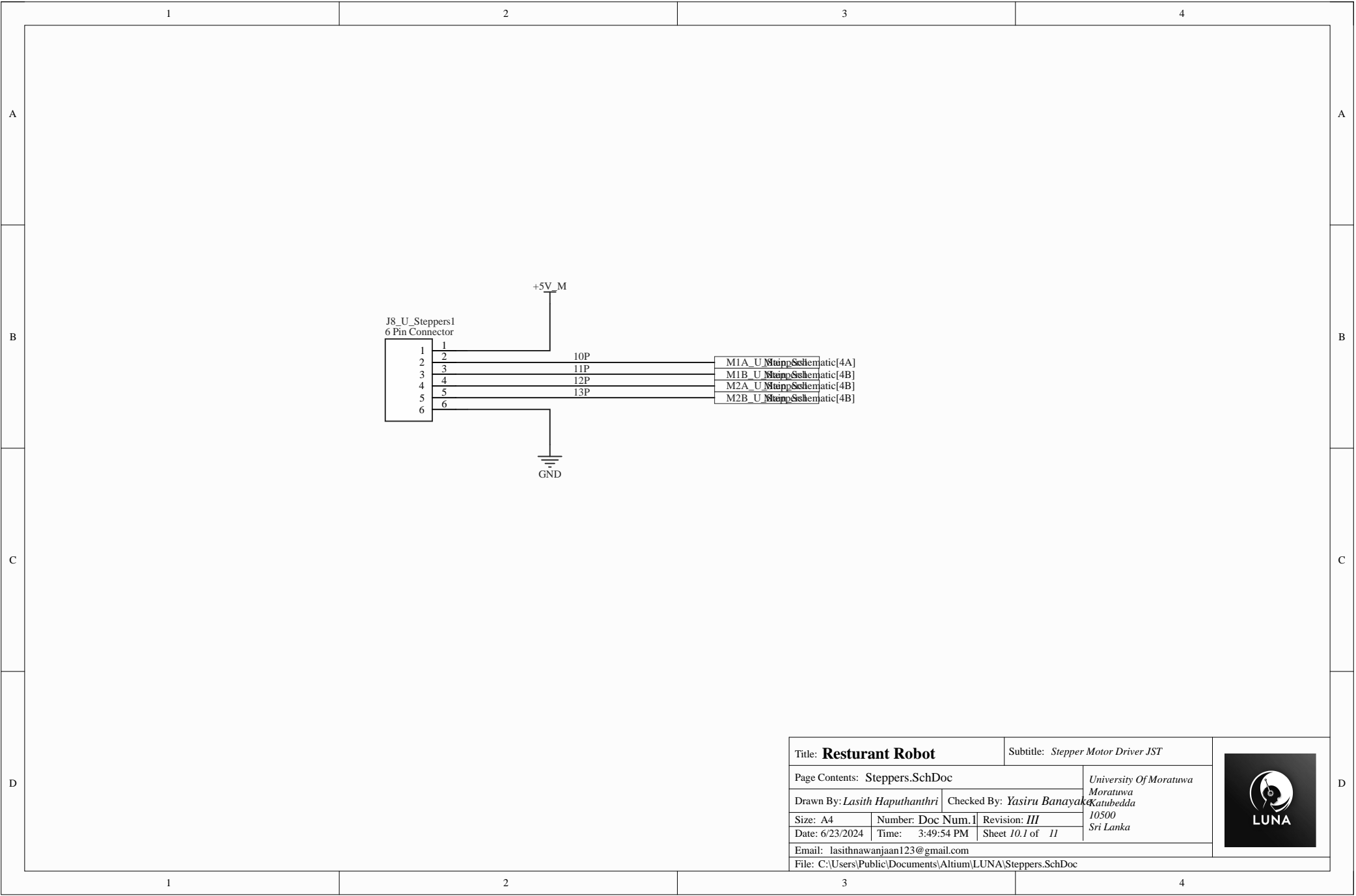
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Page Contents: Sonar Sensor.SchDoc				University Of Moratuwa	
Drawn By: <i>Lasith Haputhanthri</i>		Checked By: <i>Yasiru Banayaka</i>		Moratuwa	
Size: A4	Number: Doc Num.1	Revision: <i>III</i>		Katubedda	
Date: 6/23/2024	Time: 3:49:53 PM	Sheet 8.1 of 11		10500	
Sri Lanka					
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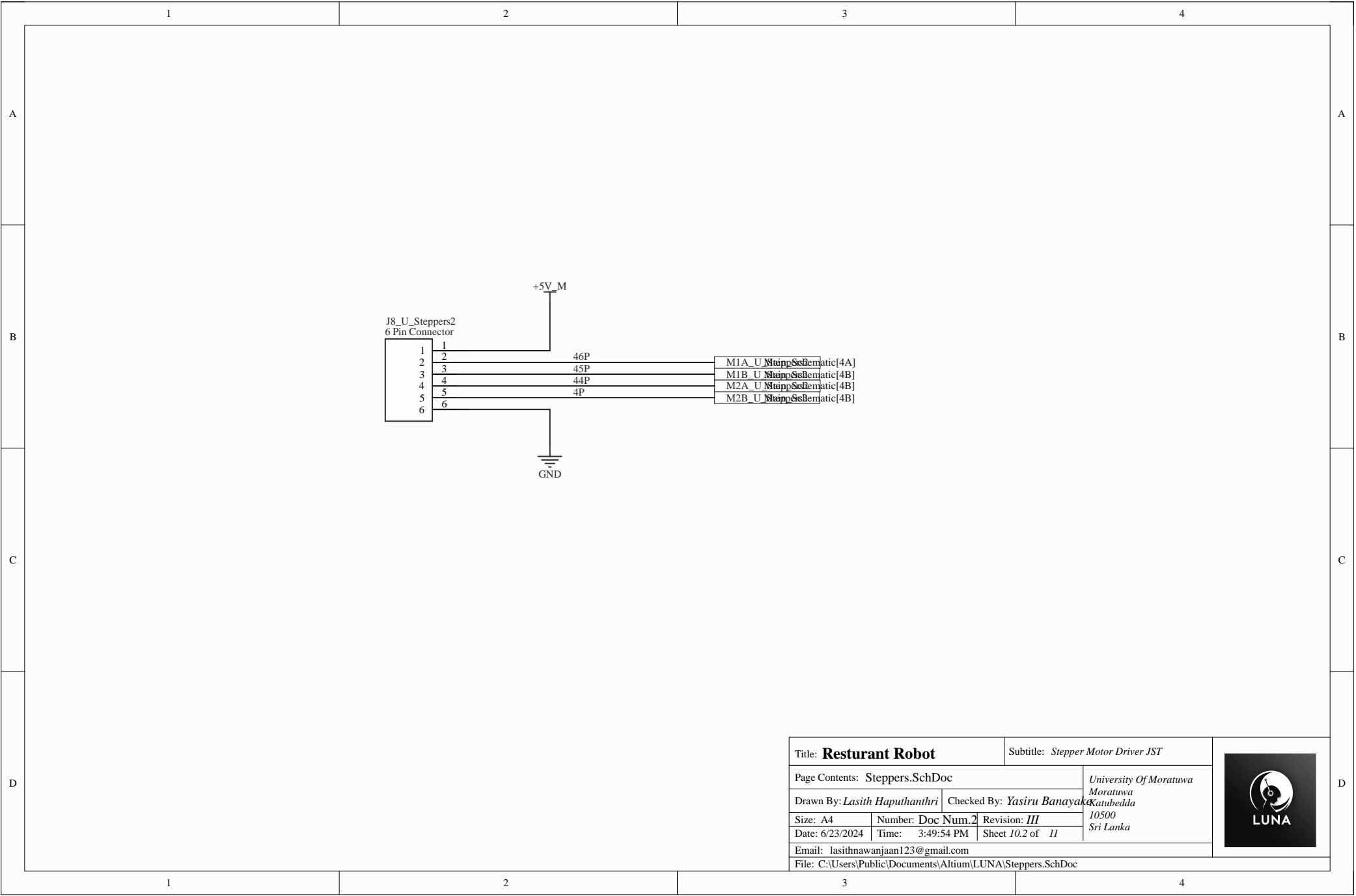




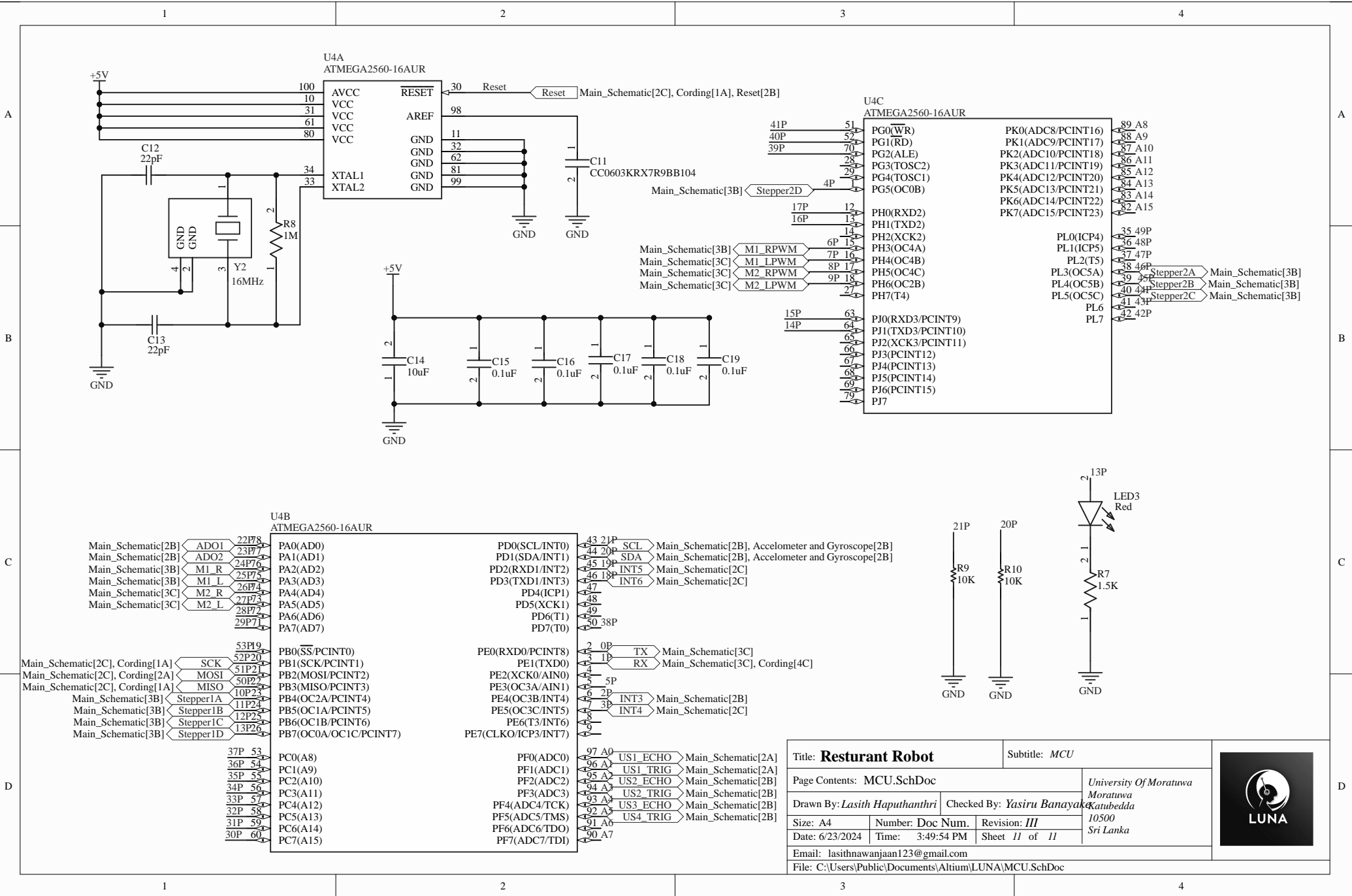



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Page Contents: Reset.SchDoc			<div>University Of Moratuwa Moratuwa Katubedda 10500 Sri Lanka</div> <div>LUNA</div>		
Drawn By: <i>Lasith Haputhanthri</i>		Checked By: <i>Yasiru Banayaka</i>			
Size: A4	Number: Doc Num.	Revision: <i>III</i>			
Date: 6/23/2024	Time: 3:49:54 PM	Sheet 9 of 11			
Email: lasithnawanjaan123@gmail.com					
File: C:\Users\Public\Documents\Altium\LUNA\Reset.SchDoc					









Title: <b>Resturant Robot</b>			Subtitle: <i>MCU</i>		
Page Contents: MCU.SchDoc					
Drawn By: <i>Lasith Haputhanthri</i>		University Of Moratuwa Moratuwa Katubedda 10500 Sri Lanka			
Checked By: <i>Yasiru Banayaka</i>					
Size: <b>A4</b>	Number: <b>Doc Num.</b>	Revision: <b>III</b>			
Date: 6/23/2024	Time: 3:49:54 PM	Sheet <i>II</i> of <i>II</i>			
Email: lasithnawanjaan123@gmail.com					
File: C:\Users\Public\Documents\Altium\LUNA\MCU.SchDoc					



MPU6050 MAIN MPU6050 GIMBAL

STEPPER MOTOR ALT

STEPPER MOTOR AZ

DC MOTOR LEFT

DC MOTOR RIGHT

SPI  
PROGRAMMING  
INTERFACE

DC IN

TX

RX

ENCODER LEFT

ENCODER RIGHT

USB C

RESET

RADAR SENSOR

RADAR SENSOR

RADAR SENSOR

Line #	Name	Description	Designator	Revision ID	Revision Status	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
	0.1uF, CC0603KRX7R9BB104	CC0603KRX7R9BB104 CAP CER 0.1UF 50V X7R 0603, CAP CER 0.1UF 50V X7R 0603	C1, C3, C11, C15, C16, C17, C18, C19			8							
	10uF	CL10A106KP8NNNC Capacitor	C2, C6, C7, C8, C9, C10, C14			7							
	22pF	CC0603JRNPO9BN220 Chip Capacitor, 22 pF, +/- 5%, 50 V, -55 to 125 degC, 0603 (1608 Metric), RoHS, Tape and Reel	C4, C5, C12, C13			4							
	6 Pin Connector	B6B-XH-A_LF__SN_ Connector	J1_U_Accelometer and Gyroscope1, J1_U_Accelometer and Gyroscope2, J5_U_Motor Drivers1, J5_U_Motor Drivers2, J8_U_Steppers1, J8_U_Steppers2			6							
	TYPE-C	TYPE-C-31-M-12 USB Connectors 24 Receptacle 1 8.94*7.3mm RoHS	J3			1							
	4 Pin Connector	CONN HEADER VERT 4POS 2.5MM	J4_U_Encoders1, J4_U_Encoders2, J7_U_Sonar Sensor1, J7_U_Sonar Sensor2, J7_U_Sonar Sensor3			5	JST	B4B-XH-A(LF)(SN)	Volume Production				
	2 Pin Connector	CONN HEADER VERT 2POS 2.5MM	J6			1	JST	B2B-XH-AM(LF)(SN)	Volume Production				
	6 Pin Connector	Connector	J10			1							
	Red	LED	LED1, LED2, LED3			3							
	1.5K, 1M	AF0603FR-071KSL Anti-Sulfurated Chip Resistors Automotive Grade 1.5kΩ 1% 100ppm/°C 0603, AF0603FR-071KSL Anti-Sulfurated Chip Resistors Automotive Grade 1.5kΩ 1% 100ppm/°C 0603	R1, R2, R3, R7, R8			5							
	5.1K	0603WAF510T15E	R4			1							
	5.1K	0603WAF510T15E Resistor	R5			1							
	10K	RC0603JR-0710KL Resistor, 10 KΩ, +/- 5%, 100 mW, -55 to 155 degC, 0603 (1608 Metric), RoHS, Tape and Reel	R6, R9, R10			3							
	PT5S26SK15SMTR2LFS	TACT 5.2 X 5.2, 1.5 MM H, 260GF,	SW1			1	ITT C&K	PT5S26SK15SMTR2LFS					
	CH340G	USB Interface Integrated Circuit	U1			1							
	LM1117MPX-5.0	800mA Low-Dropout Linear Regulator, 4-pin SOT-223	U2, U3			2	Ti National Semiconductor	LM1117MPX-5.0	End of Life				
	ATMEGA2560-16AUR	IC MCU 8BIT 256KB FLASH 100TQFP	U4			1	Microchip	ATMEGA2560-16AUR	Volume Production				
	12MHz Crystal, 16MHz	ABM8G-12.000MHZ-18-D2Y-T Crystal 12MHz ±20ppm (Tol) ±30ppm (Stability) 18pF FUND 120Q 4-Pin SMD T/R, ABM8G-16.000MHZ-18-D2Y-T Crystal 12MHz ±20ppm (Tol) ±30ppm (Stability) 18pF FUND 120Q 4-Pin SMD T/R	Y1, Y2			2							