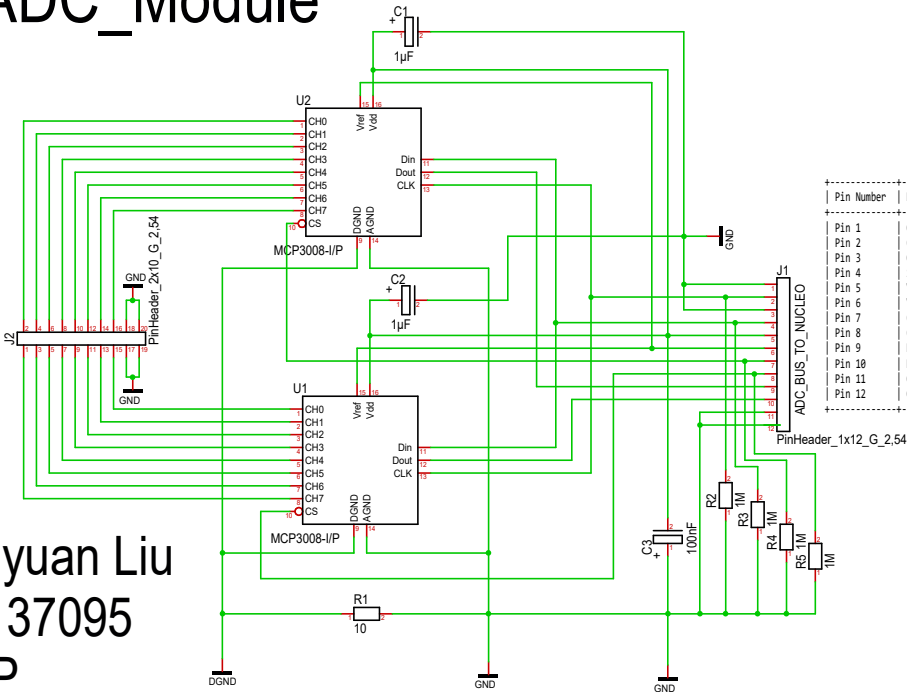


ADC\_Module

ADC\_Analog\_Output

Qinyuan Liu  
20137095  
FYP

Header Pin	Description	MCP3008 Connection
Pin 1	U1_ADC_CH7	MCP3008_U1_ADC_CH7
Pin 2	U2_ADC_CH0	MCP3008_U2_ADC_CH0
Pin 3	U1_ADC_CH6	MCP3008_U1_ADC_CH6
Pin 4	U1_ADC_CH5	MCP3008_U1_ADC_CH5
Pin 5	U1_ADC_CH4	MCP3008_U1_ADC_CH4
Pin 6	U2_ADC_CH3	MCP3008_U2_ADC_CH3
Pin 7	U2_ADC_CH2	MCP3008_U2_ADC_CH2
Pin 8	U1_ADC_CH1	MCP3008_U1_ADC_CH1
Pin 9	U1_ADC_CH0	MCP3008_U1_ADC_CH0
Pin 10	U2_ADC_CH7	MCP3008_U2_ADC_CH7
Pin 11	GND	-
Pin 12	GND	-
Pin 13	GND	-
Pin 14	GND	-
Pin 15	GND	-
Pin 16	GND	-
Pin 17	GND	-
Pin 18	GND	-
Pin 19	GND	-
Pin 20	GND	-



Pin Number	Description	MCP3008 U1	MCP3008 U2	Nucleo Pin	Pin Configuration
Pin 1	GND	-	-	CN18 Pin 20	GND
Pin 2	CLK	CLK	CLK	PA5 (CN5 Pin 5)	SPI1_SCK
Pin 3	GND	-	-	CN6 Pin 8 (GND)	Ground
Pin 4	SPI_Data_In (Duo)	Din	Din	PA7 (CN5 Pin 7)	SPI1_MOSI
Pin 5	VDD	VDD	VDD	+3.3V (CN6 Pin 16)	Power
Pin 6	Vref	Vref	Vref	+3.3V (CN6 Pin 16)	Reference Voltage
Pin 7	CS_U2	-	CS_U2	PC14 (CN7 Pin 25)	GPIO_Output (Chip Select)
Pin 8	CS_U1	CS_U1	-	PC15 (CN7 Pin 27)	GPIO_Output (Chip Select)
Pin 9	Dout_U2	-	Dout_U2	PA6 (CN5 Pin 12)	SPI1_MISO
Pin 10	Dout_U1	-	Dout_U1	TBD	TBD
Pin 11	GND	A&D_GND	A&D_GND	CN18 Pin 20	Ground
Pin 12	GND	A&D_GND	A&D_GND	CN18 Pin 20	Ground

Maßstab	66.67%	Firma	Zeichner	Blatt
Änderung	26.10.2024 16:50		Titel	
Ausgabe	27.10.2024 18:51			
Datei	STM32_FYP_ADC_Module.T3000		Projekt	