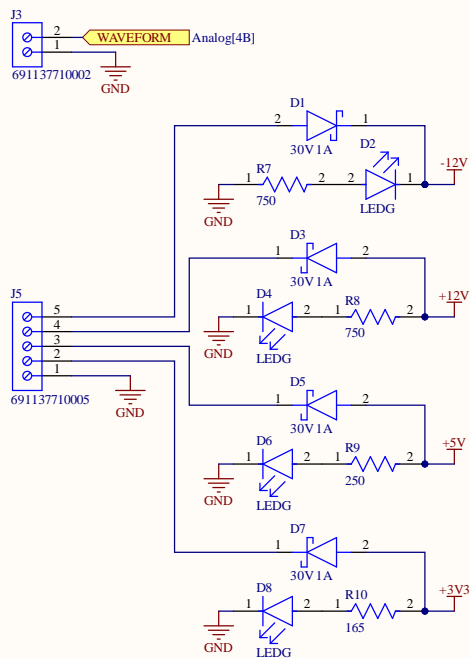
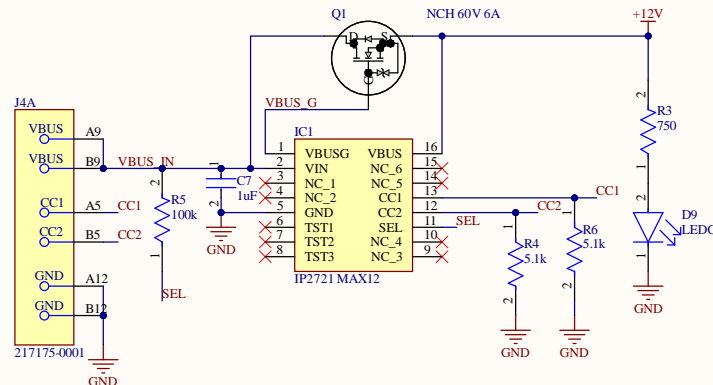


Title		
Size	Number	Revision
B		
Date:	12/29/2025	Sheet of
File:	C:\Users\...\Digital.SchDoc	Drawn By:

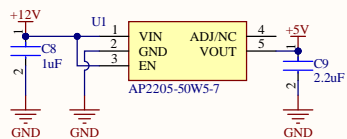
Output Terminals



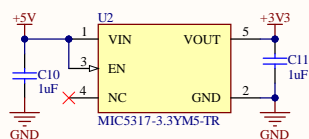
USBC PD



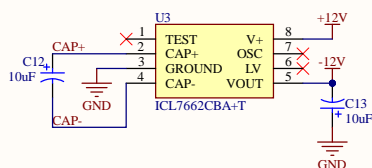
LDO 12V to 5V



LDO 5V to 3V3

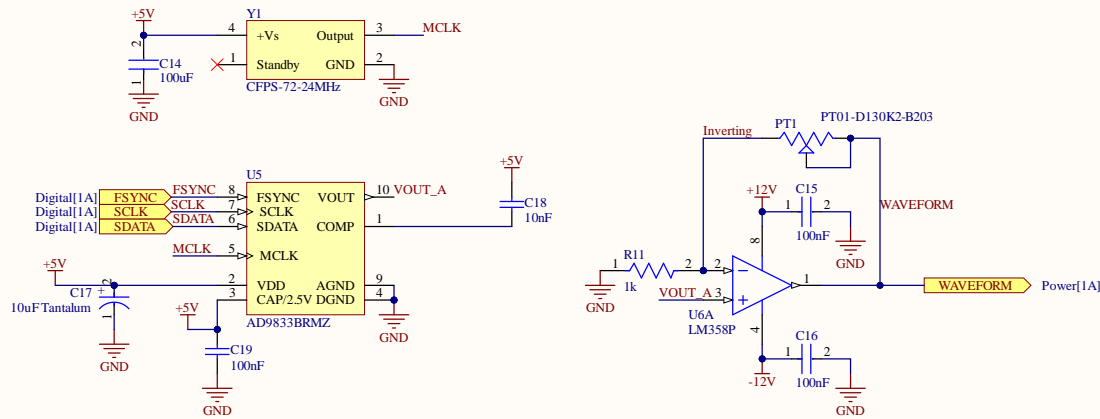


Charge Pump 15V to -15V



Title		
Size B	Number	Revision
Date:	12/29/2025	Sheet of
File:	C:\Users\...\Power.SchDoc	Drawn By:

Waveform Generator



Title		
Size B	Number	Revision
Date:	12/29/2025	Sheet of
File:	C:\Users\...\Analog.SchDoc	Drawn By:

Digital

-12V
+12V
+5V
+3V3
GND

Analog

WAVE
GND

STLINK

+3V3
SWCLOCK
SWDIO
NRST
GND

U1

SW5
NRST

SINE

TRIANGLE

SQUARE

SAWTOOTH

FREQUENCY | PHASE

VOLTAGE

PT1

+3V3 CS1B RES A0 SCL SI GND NC

Digital

-12V
+12V
+5V
+3V3
GND

Analog

WAVE
GND

STLINK

+3V3
SWCLOCK
SWDIO
NRST
GND

U1

SW5
NRST

SINE

TRIANGLE

SQUARE

SAWTOOTH

FREQUENCY | PHASE

VOLTAGE

PT1

+3V3 CS1B RES A0 SCL SI GND NC

Line#	Name	Description	Designator	Revision ID	Revision State	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
	4.7uF	Chip Multilayer Ceramic Capacitors for General Purpose, 0805, 4.7uF, X5R, 15%, 20%, 25V	C1		Unknown server		1	Bradford Electronics	RLR20C2371FS					
	100nF	Ceramic 100nF X7R 16V 5%, Ceramic 100nF X7R 16V 5% 1206	C2, C3, C4, C6, C19		Unknown server		5	HEMET	C06030104URACTU	Volume Production				
	10nF	CAP 10nF 10V ±5% 1206 (3216 Metric) Thickness 1.45mm SMD	C5, C18		Unknown server		2	HEMET	C1206C103JG4C					
	1uF	Cap Ceramic 1uF 25V X7R 20% Pad SMD 1206 +125°C Automotive T/R	C7, C8		Unknown server		2	TDK	OGASL2X7R1E109M160AD	Volume Production				
	2.2uF		C9		Unknown server		1							
	1uF	CAP 1uF 10V ±5% 1206 (3216 Metric) Thickness 1.3mm SMD	C10, C11		Unknown server		2	KYOCERA V/X	1206G2105JAT4A	Volume Production				
	10uF	Tantalum Capacitor, 10uF, +/- 10%, 50V, -55 to 125 degC, 2-Pin SMD (7343-43), RoHS, Tape and Reel	C12, C13		Unknown server		2	Vishay	293D106X000E2TE3	Volume Production				
	100uF, 100nF	C12060.10uF ODG 10.00% 25V X7R	C14, C15, C16		Unknown server		3	HEMET	C1206C104K3GACTU	Volume Production				
	10uF Tantalum	CAP TANT 10uF 10% 20V 1411	C17		Unknown server		1	Vishay	293D106X000E2TE3	Volume Production				
	30V 1A	Schottky Diode	D1, D3, D5, D7		Not managed		4	Toshiba	CLU10S30-H3F1B	Volume Production				
	LEDG	LED GREEN CLEAR SMD	D2, D4, D6, D8, D9		Unknown server		5	Lite-On	LTST-C170GKT	Volume Production				
	PEC12R-4225F-S0024	24 Pulse Incremental Mechanical Rotary Encoder w/ 6mm Flat Shaft Through Hole Bourns PEC12R-4225F-S0024	ENC1		Not managed		1							
	IP2721 MAX12	Integrated Circuit	IC1		Not managed		1							
	61300511821		J1		Unknown server		1	Wurth Elektronik	61300511821					
	61300811821		J2		Unknown server		1	Wurth Elektronik	61300811821					
	691137710002		J3		Unknown server		1	Wurth Elektronik	691137710002					
	217175-0001	CONN RCP USB2.0 C 6+18P SMD RA	J4		Unknown server		1	Molex	217175-0001	Volume Production				
	691137710005		J5		Unknown server		1	Wurth Elektronik	691137710005					
	PR01-D130K2-B203		PF1		Not managed		1							
	NOH 60V 6A	N-ch MOSFET, 60 V, 6.0 A, 0.038 [to @10V, SOF, 323P(LFM)]	Q1		Not managed		1	Toshiba	SSM9K41TULF8					
	10k	RES Thin Film, 10kΩ, 0.1%, 0.063W, 50ppm/°C, 0402	R1, R2		Unknown server		2	Venkel	TFCRD402-16W-C-1002BT	Volume Production				
	750	Thin Film Chip Resistors Automotive Grade 10kΩ 0.1% 50ppm/°C 0805	R3		Unknown server		1	Yageo Group	AT0805BRE0710KL	Volume Production				
	5.1k	RES Thin Film, 5.1kΩ, 0.25%, 0.1W, 25ppm/°C, 0603	R4, R6		Unknown server		2	Venkel	TFCRD603-10W-E-5101CT-1K	Volume Production				
	100k, 1k	0805, RES 1.05K OHM 0.5% 1/5W 0805	R5, R11		Unknown server		2	Vishay	MCL0805F1001BP100	Volume Production				
	750, 250	6.8kΩ ±5%, 0.125W 0805 Thick Film Chip Resistor AEC-Q200 compliant, 0805 250 Ohms 0.25W	R7, R8, R9		Unknown server		3	Stackpole Electronics	RMCFR005JTBK80	Volume Production				
	165	RES Thin Film, 620Ω, 0.25%, 0.1W, 25ppm/°C, 0603	R10		Unknown server		1	Venkel	TFCRD603-10W-E-6200CT	Volume Production				
	PT36479C89MTR2LFS	TACT 4.5 X 4.5, 3.8 MMH, 2.5N	SW1, SW2, SW3, SW4, SW5		Unknown server		5	C&K Components	PT36479C89MTR2LFS	Volume Production				
	AP2205-50W6-7	Integrated Circuit	U1		Not managed		1							
	MICS317-3.3YM5-TR	IC:RES LINEAR 3.3V 150MA SOT23	U2		Unknown server		1	Microchip	MICS317-3.3YM5-TR	Volume Production				
	ICL7862CBA+T	Integrated Circuit	U3		Not managed		1	Analog Devices	ICL7862CBA+T	Volume Production				
	STM32F030C8T6	ARM Cortex-M0 32-bit MCU, 64KB Flash, 8KB Internal RAM, 39 I/Os, 48-Pin LQFP, -40 to 85 degC, Tape and Reel	U4		Unknown server		1	STMicroelectronics	STM32F030C8T6TR	Volume Production				
	AC9833SRMZ	Low Power, 12.65 mW, 2.3 V to 5.5 V, Programmable Waveform Generator, 10-Bit Serial, RM-10, 50 Tube, Pb-Free	U5		Unknown server		1	Analog Devices	AC9833SRMZ	Volume Production				
	LM358P	Dual Operational Amplifier, 3 to 32 V, 0 to 70 degC, 8-Pin PDIP (P), RoHS, Tape and Reel	U6		Unknown server		1	Texas Instruments	LM358P	Volume Production				
	CPFS-72-24MHz	831019082 W6 SPXO Crystal Oscillator	Y1		Unknown server		1	Wurth Elektronik	831019082					