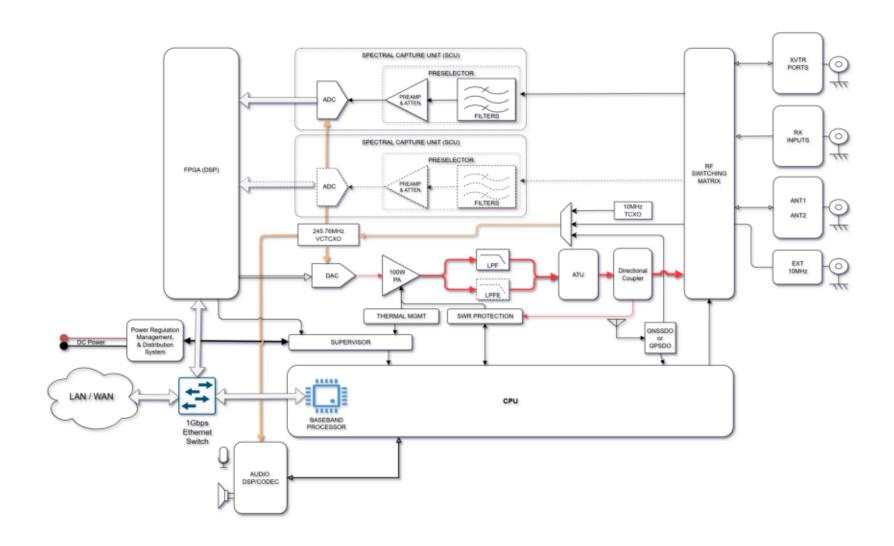
Board 20250805-B-0163-I Overview



Part Type Summary

Part Type	Count
Resistor	51
IC	37
Capacitor	31
Connector	20
Inductor	10
Transistor	6
Ferrite Bead	6
Crystal	4
Diode	4
Hardware	3
Oscillator	2
Fuse	2
LED	2
Subassembly	1
PCB	1

Part List (rows 1-30)

Pait List (10WS 1-30)
Description
M2.5 Threaded Soldered Spacer, 3.0mm Height, 5.1 Outside Diameter, 3.7mm Hole, Non-Plated
0.4mm Pitch, 3.0mm Height, Non-Polarized
IC ADC 8BIT 1MSPS SOT23-6
CONN MAGJACK 1PT GIGIBIT Y/GO
IC I2C MUX 2CH BI-DIR TSSOP-14
IC EEPROM 1KBIT 3MHZ 8SOIC
CONN JACK STEREO 3.5MM R/A
IC USB 2.0 4PORT HUB CTLR 36QFN
4.3-V TO 17-V INPUT, 3-A, FCCM M
CAP MLCC 1uF 6.3V X7R 0402 10%
IC GIGABIT SWITCH
IC SWITCH SPDT QUAD 16TSSOP
Ethernet PHY 10/100/1000, QFN-68
IC I2C I/O EXPANDER GP 24-TSSOP
N-FET Power MOSFET 25V 29A Continuous Current
N-FET Power MOSFET 30V 32A Continuous Current
OSCILLATOR XO 25.0000MHZ HCMOS TTL 30ppm
CAP ALUM 100UF 20% 25V SMD
CAP ALUM 47UF 20% 35V SMD
CONN RCPT 40POS .4MM VERT SMD
CONN MCX JACK STR 50 OHM PCB
CONN JACK MMCX STR PCB
CAP MLCC 8pF 50V C0G 0402 0.1pF
0402 18pF 50volts C0G 1%
500mA Dual Power Switch IC w/ Over Current Protection, SOIC-8
CAP CER 620PF 50V 5% COG 0805
IC SIGMADSP CODEC PLL 32LFCSP
TRANSISTOR BIPOLAR 250MHz 200mA 40V SOT-23-3
CONN .8MM EDGE RATE SOCKET ASSEMBLY
 IC QUAD BUS BUFF GATE 14-TSSOP

Part List (rows 31-60)	

Pait List (10WS 31-00)
Description
 CAP CER 1UF 25V X7R 0603
CAP CER 7.6PF +/-0.1PF 50V 0402 COG
1206 25V 33uF X5R 20% T: 1.6mm
SMD/SMT 0603 10V 4.7uF X7R 20%
Inductor, 27nH, 5%, 0402
PC TEST POINT MINIATURE SMT
CONN HEADER 3POS .100 VERT TIN
CONN HEADER 4POS .100 VERT TIN
CONN D-SUB 15P RECPT FILTERED R/A BRD LOCK J/S
CONN MAGJACK 1PORT 1000 BASE-T
CONN .050" Tiger Eye High-Reliability Socket Strip
Crystal 12.0000MHz 20ppm 18pF 250 Ohm 4-SMD
CRYSTAL 24.0000MHz 20ppm 6pF 150 Ohm 4-SMD
CRYSTAL 32.7680KHZ 12.5PF SMT
Current-Sense Resistor, 200m, 5%, 0.1W, 0603 (1608 Metric)
IC INVERTER UHS DUAL HS TSOP-6
MOSFET N/P-CH 20V SSOT-6
IC I2C EEPROM 64K 8SOIC
CAP ALUM 220UF 20% 6.3V SMD
USB 2.0 1:2 Mux, UQFN-10
FERRITE BEAD 1.248 KOHM 0805 1LN
FERRITE 200MA 0.7 DCR 2.2K OHM 0805 SMD
Ferrite Bead, 600 Ohm, 2A, 1206
FERRITE BEAD 600ohm 1.5A 0805
FERRITE BEAD 600ohm 1.5A 0805
FERRITE CHIP 600 OHM 500MA 0603
Inductor, 2.2uH, 5.2A, 40.4mOhms
GNSS module
IC Hex Non-Inverting Buffer TSSOP-14
Dual comparator, rail to rail inputs, open drain outputs, SOT23-8

Part List	rows 61-90)	L

Description
20A Load Switch IC, 4.2mOhm Rds, 24V Max
INDUCTOR Fixed Inductors 2.2uH 20%
Fixed Inductors 4.7uH 20% 3A shielded
IND PWR SHLD 20% 3.3UH SMD
Jitter blocker, 10 MHz, single output, SOT23-6L
LDO Voltage Regulators 1.5A CMOS LDO 5.0V DFN8
CRYSTAL 32.768 KHZ SMD 7pF 20ppm
IC I2C MUX 4CH BI-DIR 20-TSSOP
IC ESD-PROT ARRAY 4CH SOT-23
M2.5 Threaded Soldered Spacer, 6.0mm Height, 5.1 Outside Diameter, 3.7mm Hole, Non-Plated
Micro-B USB Vertical Type, -30 to 85 degC, 5-Pin SMD, RoHS, Tape and Reel
CAP MLCC 0.1uF 25V X7R 0402 10%
CAP MLCC 0.47 uF 25V X7R 0603
CAP CER 1000PF 25V 10% X7R 0402
MLCC - SMD/SMT 25V 0.01uF X7R 0402 10%
CAP MLCC .01 uF 50V 0603 X7R 5%
CAP MLCC 10uF 6.3V X7R 0603 20%
MLCC 1206 10uF 25V X7R 10%
MLCC 0603 15nF 25V C0G 5%
CAP MLCC 22pF 25V C0G 0402 5%
CAP CER 22UF 35V X5R 0805
CAP MLCC 27pF 50V C0G 0402 10%
CAP CER 0.056UF 25V X7R 0603
CAP MLCC 56pF 100V C0G 0805 2%
CAP MLCC 100pF 25V X7R 0402 10%
CAP MLCC 680 pF 25V C0G 0603
CAP MLCC 820pF 25V X7R 0402 10%
CAP CER 33pF 50V C0G 0402 1%
MGRID HDR SHRD SMT /CAP 10CKT
CONN HEADER 14POS 2MM VERT SMD

Part List (rows 91-120)	L

Talt List (10W3 51-120)
Description
CONN 16-PIN MGRID HDR SHRDSMT/SLOTPGCAP
CONN HEADER 26POS STR 2MM SMD AU
MOSFET N-CHANNEL 2.7A 30V SOT-23-3
IC, 0-ohm jumper, SOT-23, pins 2-3
IC CONFIG MULT-FUNC GATE SOT23-6
CONN HEADER VERT 12POS 2.5MM
IC PMU 4DCDC/8LDO 98BGA
Inductor, 3.3uH, 1.15A, 20%, 0806
4018 3.3uH 66mOhms +/-20%Tol 2000mA
Inductor, shielded, 8.2uH, 17.1A, 20% SMT 10x10x11.3mm
IC PWR 8-BIT SHIFT REGIS 20-SOIC
PTC RESETTABLE .50A 15V 1812
PTC RESETTABLE .14A 60V 1812
UNPROG IC PIC 18K uC IC 8-Bit 64MHz 32KB 28-SSOP
PHONO JACK 8POS R/A WHITE/RED
I2C Real Time Clock, MSOP-8
RES 10 ohm 3/4W 1% 1206 SMD
RES 0 ohm 1/16W 0402 SMD
RES 0.0 OHM 1/10W 5% 0603 SMD
RES 1 kohm 1/16W 1% 0402 SMD
RES SMD 1.2K OHM 1% 1/16W 0402
RES 1.24k OHM 1/16W 1% 0402 SMD
RES 2.00 Kohm 1/16W 1% 0402 SMD
RES 2.1 Kohm 1/16W 1% 0402 SMD
RES SMD 2.2K OHM 1% 1/16W 0402
RES 2.7K OHM 1/16W 1% 0402 SMD
RES 3.0 Kohm 1/16W 1% 0402 SMD
RES 4.12K OHM 1/16W 1% 0402 SMD
RES SMD 4.7K OHM 1% 1/16W 0402
RES 5.1 OHM 1/8W 1% 0805 SMD

Part List	(rows 121-150)	

Part List (rows 121-150)	
Description	
RES 5.49k OHM 1/16W 1% 0402 SMD	
RES 6.65 Kohm 1/16W 1% 0402 SMD	
0612 Reverse Thick Film Chip Resistors 1W 7mOHM 1%	
RES 8.45 Kohm 1/16W 1% 0402 SMD	
RES SMD 9.31K OHM 1% 1/16W 0402	
RES 10 kohm 1/16W 1% 0402 SMD	
Thick Film Resistors - SMD 1/16watt 12Kohms 1% Commercial Use	
RES 12.1 Kohm 1/16W 1% 0402 SMD	
RES SMD 15K OHM 1% 1/16W 0402	
RES SMD 21.5K OHM 1% 1/16W 0402	
RES 22 ohm 1/16W 5% 0402 SMD	
RES 22 ohm 1/16W 5% 0402 SMD	
RES 30.9 Kohm 1/16W 1% 0402 SMD	
RES 31.6 Kohm 1/16W 1% 0402 SMD	
RES 33.0 OHM 1/16W 1% 0402 SMD	
RES 39 ohm 1/16W 1% 0402 SMD	
RES 41.2 Kohm 1/16W 1% 0402 SMD	
RES 47 Kohm 1/16W 1% 0402 SMD	
RES 49.9 ohm 1/16W 1% 0402 SMD	
RES 54.9 Kohm 1/16W 1% 0402 SMD	
RES 56 Kohm, 1/16W 1% 0402 SMD	
RES 61.9 Kohm 1/16W 1% 0402 SMD	
RES 63.4 Kohm 1/16W 1% 0402 SMD	
RES 69.8k 1/16W 1% 0402 SMD	
RES SMD 90.9 OHM 1% 1/16W 0402	
Resistor, 100, 1%, 0.1W, 0603 (1608 Metric)	
RES 100k ohm 1/16W 1% 0402 SMD	
RES 121 OHM 1/16W 1% 0402 SMD	
RES 127 Kohm 1/16W 1% 0402 SMD	
RES 137k OHM 1/16W 1% 0402 SMD	

Part List (<u>rows 151-180)</u>	

Part List (rows 151-180)		
Description		
RES 200 Kohm 1/16W 1% 0402 SMD		
RES 240 ohm 1/16W 1% 0402 SMD		
RES 330 ohm 1/16W 1% 0402 SMD		
RES 499 ohm 1/16W 1% 0402 SMD		
RES 560 OHM 1/10W 1% 0603 SMD		
RES 976 ohm 1/16W 1% 0402 SMD		
INDUCTOR FIXED 750nH 2% SMD 1206		
DIODE SCHOTTKY 30V 0.5A SOD-323-2		
AUTHENTICATION CHIP I2C 8-SOIC		
IC Flip Flops SNGL D-TYPE POSITIVE TSSOP-8		
LED GREEN CLEAR 0805 SMD		
LED RED CLEAR 0805 SMD		
IC SWITCH SPDT SM8		
Supercapacitor 0.47F 6.3X14mm Radial		
Switching Voltage Regulator, 0.8V - 7V Out, 1A, 740kHz		
CAP TANT 100UF 20V 10% 2917		
CAP TANT 330UF 6.3V 20% 2917		
TCXO 10MHz 0.5ppm 15pF SMD		
TRANSISTOR BIPOLAR 125MHz 2000mW 1A 60V SOT-223-4		
TVS Diode, 0.25pF, 0402, 14VWM, 40VC		
DIODE TVS 15V 24.6A 5W SMB (DO-214AA-2)		
DIODE TVS ESD Suppressor 28V SOD8820		
CHOKE CMC USB 2.0, 413 nH, 400mA DCR 650mOhm, SMT		
CONN USB TYPE A VERTICAL HIGH RETENTION		
IC USB HS QUAD UART/SYNC 64-LQFP		
Adjustable LDO 1A QFN-6		
IC VOLT-LEVEL TRANSLATOR US8		
IC SWITCHING POWER SUPPLY 4.5-45VIN 4.5-14VOUT		
Raspberry Pi and Heat Sink ASSY		
BIGBEND CPU		