

Bill of Materials

Bill of Materials for Project [B106AA.PrjPcb] (No PCB Document Selected)

Source Data From:	B106AA.PrjPcb
Project:	B106AA.PrjPcb
Variant:	None

Creation Date:	11.07.2020	23:31
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Footprint	Comment	LibRef	Designator	Description	Quantity
CAPACITOR_0402	Multilayer Ceramic Capacitor	Capacitor - 100nF [0402-6V3] Capacitor - 33pF [0402-6V3] Capacitor - 1uF [0402-6V3] Capacitor - 1nF [0402-6V3]	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C37, C38, C39, C42, C43, C44, C46, C47, C48, C49, C50, C51, C52, C53, C54, C56, C57, C58, C59, C60, C61, C63, C64, C65, C66, C67, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C88, C89, C90, C91, C92, C93, C94, C96, C98, C97, C98, C101, C102, C103, C104, C106, C107, C108, C109, C110, C111, C112, C115, C116, C117, C118, C119, C120, C121, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C138, C139	Capacitor - 100nF [0402-6V3] (Ceramic), Capacitor - 33pF [0402] (Ceramic), Capacitor - 1uF [0402] (Ceramic), Capacitor - 1nF [0402] (Ceramic)	121
CAPACITOR_0402	Multilayer Ceramic Capacitors	Capacitor - 13pF [0402-5V3] Capacitor - 4.7uF [0402-6V3] Capacitor - 470nF [0402-6V3] Capacitor - 3300pF [0402-10V]	C35, C36, C40, C41, C45, C55, C62, C68, C100, C122, C136, C137	Capacitor - 13pF [0402] (Ceramic), Capacitor - 4.7uF [0402] (Ceramic), Capacitor - 470nF [0402] (Ceramic), Capacitor - 3300pF [0402] (Ceramic)	12
CAPACITOR_CAN-B6	Aluminium Organic Polymer Capacitors	Capacitor - 390uF [Can-16V]	C86, C87	Capacitor - 390uF 16V [Can] (Electrolytic)	2
CAPACITOR_0603 - TANTALUM	Tantalum Capacitor	Capacitor - 10uF [0603-6V3] (Tantalum) Capacitor - 47u [0603-6V3] (Tantalum)	C99, C105, C113, C114	Capacitor - 10uF [0603] (Tantalum), Capacitor - 47uF [0603] (Tantalum)	4
ESD_0402	ESD Suppressors	Diode - ESD Protection	D1, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19	TVS Diode (Bi-directional)	12
LED_0402	SMD LED (Blue)	Diode - LED (0402-Blue)	D2, D3, D4, D5, D6, D7, D8	Standard LEDs - SMD PICOLED28MBLUE LED, 25mA @ 5mA	7
INDUCATOR_0603	Ferrite Bead 2A [0603]	Ferrite Bead - 2A [0603]	FB1, FB2	Ferrite Beads 0603 100ohms 200mA Auto Inductance	2
Connector_T unc 2P - H	Solar Power Socket	Connector - Mini Tunic 2P (1.25)	J1	Mini Tunic Connector with 2P	1
Connector - SD Module	Memory Card Connectors	Connector - SD Slot	J2	Memory Card Connectors TFR Reader (HINGE TYPE)	1
Connector - SIM Tray	SIM Holder Tray	Connector - SIM Holder	J3	Memory Card Connectors ASSY 1.90 SIM CARD R IM CARD READER CONNN.	1
Connector_T unc 6P - H	6P Tunic Connector	Connector - Mini Tunic 6P (1.25)	J4	Mini Tunic Connector with 6P	1
Connector_T unc 6P - H	TIH Sensor Socket	Connector - Mini Tunic 6P (1.25)	J5	Mini Tunic Connector with 6P	1
Connector_T unc 4P - H	4P SMD Tunic Connector	Connector - Mini Tunic 4P (1.25)	J6	Mini Tunic Connector with 4P	1
Connector_T unc 6P - H	ST Sensor Socket	Connector - Mini Tunic 6P (1.25)	J7	Mini Tunic Connector with 6P	1
Connector_T unc 2P - H	External Battery Socket	Connector - Mini Tunic 2P (1.25)	J8	Mini Tunic Connector with 2P	1
BATTERY_H OLDER - Bat - NoSilk	Battery Clip Holder and Battery	Connector - Battery Clip Holder + Battery	J9, J10	Cylindrical Battery Contacts. Clips, Holders & Springs 10MM - 19MM SM BATTERY CLIP	2
BATTERY_H OLDER - CR2032	Battery Clip Holder and Battery	Connector - Battery Holder (CR2032)	J11	Cylindrical Battery Contacts, Clips, Holders & Springs 10MM - 19MM SM BATTERY CLIP	1
INDUCTOR_X FL4015	Fixed Inductor	Inductor - 470 nH [SMD]	L1	Fixed Inductors 470uH 20% 112A 8.36mOhms AEC-Q200	1
INDUCTOR_0402	Fixed Inductor	Inductor - 1nH [0402]	L2, L3	Fixed Inductor	2
INDUCTOR_1007	Fixed Inductor	Inductor - 1mH [1007]	L4, L5	Fixed Inductor	2
SOT1215	Bipolar NPN Transistor	Transistor - BC847	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10	Bipolar Transistor - BJT BC847AQA/DFN1010D-3UREEL P/Q2	10
RESISTOR_0402	Thick Film Resistor	Resistor - 10K, Resistor - 47K, Resistor - 330R, Resistor - 249K, Resistor - 0R, Resistor - 1K, Resistor - 100K, Resistor - R59, Resistor - 604K, Resistor - 24K	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91	Thick Film Resistors - SMD 1/16 W 10 Kohms 1%, Thick Film Resistors - SMD 1/16 W 47 Kohms 1%, Thick Film Resistors - SMD 1/16 W 330 Ohm 1%, Thick Film Resistors - SMD 1/16 W 249 Kohms 1%, Thick Film Resistors - SMD 1/16 W 0 Ohms, Thick Film Resistors - SMD 1/16 W 1K Kohms 1%, Thick Film Resistors - SMD 1/16 W 100 Kohms 1%, Thick Film Resistors - SMD 1/16 W 91 Kohms 1%, Thick Film Resistors - SMD 1/16 W 604 Kohms 1%, Thick Film Resistors - SMD 1/16 W 2.7 Kohms 1%	90
RESISTOR_QMR50P	Current Sense Resistor	Resistor - 0R01 (Current Sense)	R73	Current Sense Resistors - SMD 10 W 0.01 ohms 1%	1
Connector_IP EX	Antenna	Connector - MHF	RF1	MHF Antenna Socket	1
Connector_IP EX Texas_DNT	Sense Socket	Connector - MHF	RF2, RF3	Sense Pin Connection Socket	2
SOT-23-6	Capacitive Sensor	IC - FDC1212QDNT R01	U1	Capacitive Sensor	1
SOT-23-6	Power Switch	IC - TPS22917DBVR	U2, U4	Power Switch MosFet	2
SOT-23-6	Nanopower Timer IC	IC - TPL5111	U3, U9	Timers & Support Products Ultra Low Power System Timer (35 nA) for Power Gating in duty cycled applications.	2
MPL3115A2	Board Mount Pressure Sensors	IC - MPL3115A2R1	U5	Board Mount Pressure Sensors 1.2 C VERSION	1
RV-3028-C7	Real Time Clock	IC - RV-3028-C7	U6	Real Time Clock 32.768kHz I2C Time Acc. 1ppm	1
VFN16	Voltage Level Shifter	IC - SN74A05CHT24	U7	Translation - Voltage Levels Low Power Dual Channel	1
QFN20	Battery Charger	IC - MCP73871	U8	Battery Management USB/AC Battery Charger	1
GE910 2G GSM Modem	GE910 2G GSM Module	IC - Teltit GE910QAD	U9	Teltit GE910 GPRS/UMTS Module	1
MF2	MF2 SIM Chip	IC - MF22	U11	SIM Chip MF22	1
TOPF32	8-bit MicroController	IC - ATMEGA328P	U12, U13	8-bit Microcontrollers - MCU 32KB In-system Flash 20MHz 1.8V-5.5V	1
TSSOP-16	SPI Switch IC	IC - SN3237QPWR	U14	Analogue Switch ICs 2:1 (SPDT), 4-channel switch with 1.8V to 16V TSSOP-40 to 125	1
VSON-10	Buck-Boost Converter	IC - TPS63802DLAT	U15	Switching Voltage Regulators High current, high efficiency single inductor buck-boost converter 10-VSON-HR 40 to 125	1
MSOP-8-4	I2C Bus Repeater	IC - TCA9147ADGK R	U16	Interface - Signal Buffers, Repeaters Level-Translating I2C Bus Repeater	1
TSSOP-24	I2C Switch IC	IC - TCA9548APWR	U17	Switch ICs - Various 8-Channel I2C Switch	1
TSSOP-14 (Logic Gate)	IC - SN74HC5702 QPWRQ1	U18	U18	Logic Gates Quadrate 2-input NOR gates with Schmitt-trigger inputs 14-TSSOP-40 to 125	1
TSSOP-14	Logic Gate (OR)	IC - SN74HC532	U19	Logic Gates Quadrate 2-input OR gates with Schmitt-trigger inputs 14-TSSOP-40 to 125	1
TSSOP-14	Logic Gate (NAND)	IC - SN74HC500	U20	Logic Gates Quadrate 2-input NAND gates with Schmitt-trigger inputs 14-TSSOP-40 to 125	1
TDFN-10	Battery Gauge	IC - MAX17055ET1	U21	Battery Management Stand-Alone Mode/Gauge MS Fuel Gauge	1
VQFN20	I2C IO Expander	IC - PCF8574RGYR	U22	Interface - I/O Expanders Remote 8-Bit I/O Expander for I2C-Bus	1
SOT-23-5	LDO Voltage Regulator	IC - TPS7A033POB VR	U23, U24	LDO Voltage Regulators Cap-Free NMOS 200mA	2
AP9211	Battery Management IC	IC - AP9211	U25	Battery Management ICs, Chip Protection 12Vdss 12Vgss 100mW	1
ABRACON_CRYSTAL	7.3728 MHz	Crystal - 7.3728 MHz (Abrakon)	X1, X2	Crystals 7.3728MHz 18pF -40C +85C	2
Approved	Notes				307