

Digital Card
Active parts
BOM

Part No.	Qty.	Description	Manufacturer 1	Brief Functional Description
3000-04401	3	Transistor, SMT, Gen Pur, NPN, Amplifier, MMBT4401, SOT 23	Fairchild, MMBT4401	2 - Used to control Clock and Data lines in Logic lines. 1 - Used to control power for the accessory line.
3030-00336	3	Transistor, SMT, Gen Pur, FET, P-Channel, -1.2A, -20V, Rds(on)=0.27 Ohm@-2.7V, 0.2 Ohm@-4.5V, NDS336P, SOT-23	Fairchild, NDS336P	1 - Used to control power to GPS board. 1 - Used to control the Enable to the VSRAM chip. 1 - Used to control power to the VSRAM chip.
3120-00331	2	Transistor, SMT, RF, FET, N-Channel, 13A, 20V, R=0.16 @ 4.5V, NDS331N, SOT 23	National Semi, NDS331N	1 - Used to control Enable line to VSRAM chip. 1 - Used to control power and Enable to VSRAM chip.
3220-04410	1	Transistor, TH, Power, NPN, Vce=100V, Veb=7V, Ic=15A, Pd=83W, D44VH10, TO-220AB	Motorola, D44VH10	Used to regulate 5 volt supply from 12 volt input.
3300-04148	1	Diode, SMT, Signal, High Speed Switching Rectifier, LL4148, DL 35	Diodes Inc, LL4148	Used in Thermal sense circuit.
3400-0S5JC	1	Diode, SMT, Power, Io=5A, Vfm=1.15V, Glass Passivated Rectifier, Vrrm=600V, Vr=420V, S5JC, SMC	Vishay, S5JC	Used for reverse voltage protection of the ITU from the power connection.
3500-04734	1	Diode, SMT, Zener, , ZM4734A	Vishay, ZM4734A	Used to regulate 5 volt supply from 12 volt input.
3500-84C43	1	Diode, SMT, Zener, 4.3V, BZX84C4V3ZX, SOT 23	Zetex, BZX84C4V3ZX	Used to regulate power on the Accessory power line.
4020-00074	1	I.C., SMT, Digital, 74HC Series, Dual D Flip Flop, 74HC74A, SOIC 14	Fairchild, 74HC74A	Used to select Clock for main processor.
4020-00244	1	I.C., SMT, Digital, 74HC Series, Octal Tri-State Buffer, 74HC244, SOIC 20	National Semi, 74HC244	Used to control system data input.
4030-00373	2	I.C., SMT, Digital, 74HCT Series, 3 State Octal D-Type Latch, MM74HCT373WM, SOIC 20	Fairchild, MM74HCT373WM	1 - Used as Address Latch to enable addressing to the Flash or SRAM 1 - Used to control system output data.

4031-00002	1	I.C., SMT, Digital, 74ACT Series, Quad 2-Input NOR Gate, MM74ACT02SC, SOIC 14	Fairchild, MM74ACT02SC	1 Gate - Used for CPU RESET control. 3 Gates - Used for Processor Clock Select.
4130-55257	1	I.C., SMT, RAM, Static, Static RAM, TC55257DFI-70L, SOPIC 28	Toshiba, TC55257DFI-70L	SRAM chip used to store variables and messages
4205-03222	1	I.C., SMT, Digital, Interface, RS232 Driver, MAX3222EWN, SOIC 18	Maxim, MAX3222EWN	Converts TTL signals to RS-232 to enable communication to an external data terminal or computer.
4300-0T045	1	I.C., SMT, Special Function, Linear Temp Sensor, TC45BIM3, SOT 23	National Semi, TC45BIM3	Used to sense temperature within the ITU assembly.
4750-00827	1	I.C., SMT, Surge Suppressor, 27V, 75A Peak, Automotive Transient Voltage Suppressor, SM8A27, DO-218AA	General Semiconductor, SM8A27	Used for transient voltage protection (e.g., transient load dump)
4800-02951	1	I.C., SMT, Regulator/Controller, 1.24V to 29V, Adjustable Micropower Voltage, LP2951CM, SOIC 8	National Semi, LP2951CM	Used to regulate 5 volt supply from 12 volt input.
9610-00003	1	Assembly, Purchased, GT Oncore GPS Receiver, R3111G111X	Motorola, R3111G111X	Provides date, time and GPS data to the ITU.