Orion Partial Kit Preview

This is a preview of the partial kit contents. A copy of the kit Bill of Materials (BOM) appears at the end of this document. This BOM is included with the kit and indicates all of the items that are included in the package. For those who purchased multiple kits, they are all included in a single package for delivery.

Not supplied:
Tools
Solder
Heatshrink tubing (0.1" OD tubing is needed to complete splices to the short ribbon cable that is included in the kit).

For those skilled in electronic assembly, the build time should be 30 to 60 minutes.

Detailed instructions and support info is available at:
http://www.rollanet.org/~joeh/projects/Orion/

Figure 1. Orion kit delivery: Included in the package is a BOM, an antistatic bag with the kit and mechanical components, and an ESD shielded bag with the partially assembled Orion board. *Note: the Orion board is pre-programmed with the basic PLL software revision that was current at the time of packaging.*

Orion Kit parts BOM
Assembly Instructions and support information at:
http://www.rollanet.org/~joeh/projects/Orion/

QTY	REFDES	P/N	Description
CHIP PARTS:			
1	C34	GRM1885C1H102JA01D	1000pf, 0603
1	D1	SS26T3G	Diode, schottky, SOD-123
1	D2	BAS70-04	Diode, schottky, SOT-23
1	D3	SMF16A	TVS, SOD-123
1	FB2	BLM31PG601SN1L	Ferrite bead, 1206
2	L1, L2	LQM31PN1R0MC0L	Ind, 1uH, 1206
1	Q3	NDS355AN	N-CH FET, SOT-23
1	R9	RC0805FR-07100RL	RES, 100 ohm, 0805
1	R24	RC0603FR-0720KL	RES, 20K ohm, 0805
Thru-Hole and SMA connector parts:			
1	C43	URS1A101MDD	CAP, 100uF, Radial
2	J1, J2	(e-bay specials)	SMA edge connector
1	J3	22-23-2031	Header, 3-pin, Molex
1	JP1	VTUNE jumper	30AWG solid wire, 0.8" lngth
1	P1	5103309-1	Header, dual row, 10-pin
1	P2	D2516-6002-AR	Header, dual row, 16-pin
Mechanical parts:			
1	P2-con	164-9008-E	
	P2-cbl	3801/16	Ribbon cable assembly, 5"
1	P3	22-01-3037	Housing, 3-pin, Molex
3	P3-contacts		08-50-0114 Pins, Crimp, Molex
1		L77SDE09S-ND	Conn, DB-9, female, solder-cup
4		91780A027	Standoff, 2-56, 0.5" lngth
8		91772A055	Screw, 2-56, 0.25" lngth
1		Orion board with pre-assembled components attached, MCU programmed	

S/N: _____