

# VT30LS PLL

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 Rev Level: A

**Advanced Microwave Products**  
 Verdi, NV 89439  
 VT30LS Video PLL  
 Base BOM

Item	Reference Designator	P/N	Desc	Manufacturer	Qty
1	PCB1	VT30LS PLL Rev-A	PCB, VT30LS PLL, Rev-A	LANmark	1
2	R1,11,19,28	MCR03JW223	Res, 0603, 22k ohms, 5%	Rohm	4
3	R2,20	MCR03JW471	Res, 0603, 470 ohms, 5%	Rohm	2
4	R4	MCR03JW301	Res, 0603, 300 ohms, 5%	Rohm	1
5	R5	G32BTB101M	Pot, 3mm, 100 Ohm, 20%, Tocos..	Tocos	1
6	R9,13	MCR03JW912	Res, 0603, 9.1k ohms, 5%	Rohm	2
7	R10,18,23,47	MCR03JW103	Res, 0603, 10k ohms, 5%	Rohm	4
8	R12	MCR03JW333	Res, 0603, 33k ohms, 5%	Rohm	1
9	R14,36	MCR03JW222	Res, 0603, 2.2k ohms, 5%	Rohm	2
10	R16,22	MCR03JW472	Res, 0603, 4.7k ohms, 5%	Rohm	2
11	R17,38	MCR03JW104	Res, 0603, 100k ohms, 5%	Rohm	2
12	R21,27,45,46,55	MCR03JW220	Res, 0603, 22 ohms, 5%	Rohm	5
13	R24	MCR03JW102	Res, 0603, 1k ohms, 5%	Rohm	1
14	R25	MCR03FW5361	Res, 0603, 5.36k ohms, 1%	Rohm	1
15	R29,35	MCR03JW391	Res, 0603, 390 ohms, 5%	Rohm	2
16	R32	MCR18JW270	Res, 1206, 27 ohms, 5%	Rohm	1
17	R37	MCR10JW106	Res, 0805, 10M ohms, 5%	Rohm	1
18	R39,40-43	MCR03JW105	Res, 0603, 1M ohms, 5%	Rohm	5
19	R44,51	MCR03JW683	Res, 0603, 68k ohms, 5%	Rohm	2
20	C1,4,8,10,14,32,38,42,43	C0603C104M3RAC	Cap, 0603, Ceramic, 100 nF, 20%, 25V, X7R..	Kemet	9
21	C3,13,22,27,45,46	T491A226M010	Cap, A-Case, Tant, 22uF, 10V, 20%..	Kemet	6
22	C5,53	C0603C103M3RAC	Cap, 0603, Ceramic, 10 nF, 20%, 25V, X7R..	Kemet	2
23	C6,7,29	T491A106M016	Cap, A-Case, Tant, 10uF, 16V, 20%	Kemet	3
24	C9,15,31,37,40,44,48,49	C0603C102M3RAC	Cap, 0603, Ceramic, 1nF, 20%, 25V, X7R..	Kemet	8
25	C30,35,39,41	C0603C100J5GAC	Cap, 0603, Ceramic, 10pF, 5%, 50V, NPO..	Kemet	4
26	C33	JR060	Cap, Trim, Ceramic, 2-6pF, 100V, Voltronics ..	Voltronics	1
27	C34	C0603C8R2J5GAC	Cap, 0603, Ceramic, 8.2 pF, 5%, 50V, NPO..	Kemet	1
28	C36	C0603C680J5GAC	Cap, 0603, Ceramic, 68 pF, 5%, 50V, NPO..	Kemet	1
29	C47,50,56	278M1602105K	Cap, 0805, Tant, 1uF, 16V, 10%, Matsuo..	Matsuo	3
30	C51,52	C0603C472M3RAC	Cap, 0603, Ceramic, 4.7 nF, 20%, 25V, X7R..	Kemet	2
31	C54,55	278M6301225K	Cap, 0805, Tant, 2.2uF, 6.3V, 10%, Matsuo..	Matsuo	2
32	CR1	MMBD7000	Diode, Dual, Small Signal, SOT-23, Fairchild..	Fairchild	1
33	Q1	MMBT2222	Transistor, NPN, GP, SOT-23, Fairchild..	Fairchild	1
34	Q2	MMBFJ309	Transistor, JFET, N-Channel, SOT-23, Fairchild..	Fairchild	1
35	Q3	NDT456P	Transistor, MOSFET, P-Channel, SOT-223, Fairchild..	Fairchild	1
36	U1	MIC5213-5.0BC5	IC, Regulator, LDO, 5.0V, 80mA, SC-70, Micrel..	Micrel	1
37	U4	AD8032ARM	IC, OpAmp, 80 MHz, Rail-Rail, uSOIC-8, Analog Devices	Analog Devices	1
38	U5	MB510	IC, Prescaler, 2.7 GHz, /16, 16/17, SOIC-8, Fujitsu..	Fujitsu	1
39	U6	MC145152DW2	IC, PLL, Dual Modulus, SOIC-28, Freescale..	Freescale	1
40	U7	LMC7101AIM5	IC, OpAmp, 1 MHz, Rail-to-Rail, SOT-23-5, National	National Semi	1
41	Y1	CS5032H16.00MEEQ-UT	Crystal, 16.00 MHz, 10pF, 5032 Pkg, Citizen/Abracon	Citizen	1
42	J1	A-1JA-CR	Connector, Coax, RF, 3mm SMT, Amphenol	Amphenol	1

\*\* OMIT R15,C28

\*\* TBD J2 - ADD A-1JA-CR Coax Receptacle for VT50 Applications