

Document: Viper PCB BOM	Revision: 2A2A*
Author(s): J. P. Hanuscheck	Date: 17-12-2003
Approved: Henrik Norgreen	ECO no.:
Part no.: 1591-749	Page: 1/4
Remarks: *(Revision is referring to layout + schematic revision)	



GNN Part	Pcs.	Reference	Description	Value	Tol.	Type	Max. Rating	Case	Height	Vendor	Part No.	Remark	Alternate Vendor	Alternate Part No.
2123-819	1	U1	BlueCore 2 Flash 6x6	1.8V 3.0V			1.9V 3.7V	TFBGA-84	1.20	CSR	BC215159A	RF-Critical		
2123-349	1	U2	Linear Voltage Regulator	3V, 150 mA	...	LDO	9V	SOT23-5	1.30	ON Semicond.	MC78PC30NTR		Torex	XC6209A30Mx
2123-829	1	U3	Voltage Detector	3V			12V	SC-82AB	1.10	ON Semicond.	NCP304LSQ30T1			
2123-839	1	U4	DC-DC Step-down Converter	1.8V		PWM / PFM	7V	SOT23-5	1.45	TI	TPS62202DBV	RF-Critical	Maxim	MAX1921EUT
2123-849	1	U5	Li-Ion Charge Management IC	4.2V	1.0%	bq TINY	18V	S-PDSO-N10	1.00	TI	bq24010DRC			
2123-859	1	U6	Single 3-input AND gate				6.5V	SC70-6	1.10	TI	SN74LVC1G11			
2123-899	1	U7	Balanced RF-filter	50R		Balun & BPF	500 mW	LFB 312G45SWx	1.00	Murata	LFB312G45SW 1A626	RF-Critical		
2910-079	1	X1	16 MHz Crystal, 13pF	16MHz	10 ppm	FSR, 60R	100 uW	4.0x2.5 mm	0.70	Toyocom	TSX-10A	RF-Critical	NDK	NX4025DA
2755-699	3	C1 C12 C18	Cer. Capacitor	5p6	0.25 pF	COG	50V	0402c	0.55	Murata	GRM1555C1H5R6CZ01	RF-Critical	Semco	CL05C5R6CBNx
2751-509	2	C2 C19	Cer. Capacitor	15p	5%	COG	50V	0402c	0.55	Murata	GRM1555C1H150JZ01	RF-Critical	Semco	CL05C150JBNx
2751-049	6	C3 C4 C15 C33 C34 C35	Cer. Capacitor	100n	10%	X5R	10V	0402c	0.60	Murata	GRM155R61A104KA01		Semco	CL05A104KPNx
2751-009	3	C5 C9 C13	Cer. Capacitor	10p	5%	COG	50V	0402c	0.55	Murata	GRM1555C1H100JZ01	RF-Critical	Semco	CL05C100JBNx
2753-339	4	C6 C7 C11 C17	Cer. Capacitor	33n	10%	X7R	10V	0402c	0.60	Murata	GRM155R71A333KA01		Semco	CL05B333KPNx

GNN Part	Pcs.	Reference	Description	Value	Tol.	Type	Max. Rating	Case	Height	Vendor	Part No.	Remark	Alternate Vendor	Alternate Part No.
2752-239	2	C8 C16	Cer. Capacitor	22n	10%	X7R	16V	0402c	0.60	Murata	GRM155R71C223KA01		Semco	CL05B223KONx
2751-039	7	C10 C14 C20 C25 C26 C30 C32	Cer. Capacitor	10n	10%	X7R	25V	0402c	0.60	Murata	GRM155R71E103KA01		Semco	CL05B103KANx
2741-059	2	C21 C24	Cer. Capacitor	1u	10%	X5R	10V	0603c	0.90	Murata	GRM188R61A105KA61		Semco	CL10A105KPNx
2753-399	1	C22	Cer. Capacitor	3p3	0.25pF	COG	50V	0402c	0.55	Murata	GRM1555C1H3R3CZ01	RF-Critical	Semco	CL05C3R3CBNx
2751-079	1	C23	Cer. Capacitor	10p	0.25pF	COG	50V	0402C	0.55	Murata	GRM1555C1H100CZ01	RF-Critical	Semco	CL05C100CBNx
2751-069	3	C27 C28 C29	Cer. Capacitor	10u	10%	X5R	6.3V	0805c	1.35	Murata	GRM21BR60J106KE19		Semco	CL21A106KQNx
2730-009	1	C31	Jumper, max. 50 mohm	0R0	...	FILMJ	...	0402c	0.40	Rohm	MCR01MZSJ000		Semco	RC1005x000CS
2751-899	2	C36 C37	Cer. Capacitor	1p8	0.25pF	COG	50V	0402c	0.55	Murata	GRM1555C1H1R8CZ01	RF-Critical	Semco	CL05C1R8CBNx
2183-169	1	D1	LED: RED GREEN	1.7V 2.1V				CM BRPG1211C	0.50	Seoul	SSC-YGHR411-H		Stanley	BRPG1211C
2180-179	1	D4	Zener diode	11V	5%		250 mW	SOT-23	1.10	Philips	BZX84-C11			
2180-189	1	D5	Zener diode	5.1V	5%		250 mW	SOT-23	1.10	Philips	BZX84-C5V1			
2181-219	1	D6	Schottky barrier diode (double)				200 mW	SOT323	1.10	Philips	BAT54AW			
TBD.	0	L1 L2	NM		0402I	0.45					
2211-249	3	L3 L7 L8	Ceramic Coil, ESR=0.35 ohm	10n	5%	MLCC	300 mA	0402I	0.60	Murata	LQG15HN10NJ02	RF-Critical	Semco	CIH05T10NJNx
2211-209	1	L4	Power Choke, ESR=0.3 ohm	10u	10%	WFC	450 mA	1210I	2.20	Murata	LQH32CN100K33	RF-Critical		
2211-079	2	L5 L6	Ceramic Coil, ESR=0.50 ohm	3n9	0.1nH	FILMC	170 mA	0402I	0.45	Murata	LQP15MN3N9B02	RF-Critical		
2132-269	2	Q1 Q3	NPN general purpose transistor			NPN		SOT323	1.10	Philips	BC847CW			
2132-279	1	Q2	P-ch. Enh. FET, RDSon=550 mohm			PEFET		SOT323	1.10	Infineon	BSS209PW	Critical for talktime!		

Abbreviations:

Balun Balanced to Unbalanced coupler
BPF Band Pass Filter
COG Low temp. coeff. Ceramic cap. Similar to NP0.
ESR Equivalent Serial Resistance
FILMC Film Coil
FILMJ Film Jumper
FILMR Film Resistor
FSR Fundamental Serial Resonance

MLCC MultiLayer Ceramic Coil
LDO Low (voltage) Drop-Out
PEFET P-channel Enhancement FET
PTCF Pos. Temp. Coeff. Fuse
PFM Pulse Frequency Modulation
PWM Pulse Width Modulation
WFC Wounded Ferrite Coil