

Viola V1.1 Bill of Materials (BOM)

Toradex

Part Number	Description	Manufacturer	Manufacturer Part Number	Component Designators	Component Count
C-X5R-10u-50V-20%-1210	Capacitor Ceramic X5R 10uF 50V 20% 1210	Generic	X5R-10uF-50V-20%-1210	C1, C4, C5	3
C-X7R-6.8n-16V-10%-0603	Capacitor Ceramic X7R 6.8nF 16V 10% 0603	Generic	X7R-6.8nF-16V-10%-0603	C10	1
C-X5R-1u-16V-20%-0603	Capacitor Ceramic X5R 1uF 16V 20% 0603	Generic	X5R-1uF-16V-20%-0603	C11, C35	2
C-X5R-2.2u-6.3V-20%-0603	Capacitor Ceramic X5R 2.2uF 6.3V 20% 0603	Generic	X5R-2.2uF-6.3V-20%-0603	C12	1
C-TA-22u-10V-20%-3216	Capacitor TA 22uF 10V 20% 3216	Generic	TA-22uF-10V-20%-3216	C13	1
C-TA-4.7u-10V-20%-3216	Capacitor TA 4.7uF 10V 20% 3216	Generic	TA-4.7uF-10V-20%-3216	C14, C15, C16	3
C-X7R-100n-16V-10%-0603	Capacitor Ceramic X7R 100nF 16V 10% 0603	Generic	X7R-100nF-16V-10%-0603	C2, C6, C7, C17, C18, C19, C23, C25, C26, C30, C33, C34, C36, C37	14
C-TA-47u-6.3V-20%-3216	Capacitor TA 47uF 6.3V 20% 3216	Generic	TA-47uF-6.3V-20%-3216	C20, C21	2
C-TA-100u-10V-20%-3528	Capacitor TA 100uF 10V 20% 3528	Generic	TA-100uF-10V-20%-3528	C22, C24	2
C-X5R-10u-10V-20%-0805	Capacitor Ceramic X5R 10uF 10V 20% 0805	Generic	X5R-10uF-10V-20%-0805	C27	1
C-X7R-10n-25V-10%-0603	Capacitor Ceramic X7R 10nF 25V 10% 0603	Generic	X7R-10n-25V-10%-0603	C3	1
C-X5R-22u-25V-20%-1210	Capacitor Ceramic X5R 22uF 25V 20% 1210	Generic	X5R-22uF-25V-20%-1210	C8, C9, C31	3
C-NP0-27p-50V-5%-0603	Capacitor Ceramic NP0 27pF 50V 5% 0603	Generic	NP0-27p-50V-5%-0603	C28, C29	2
CON-Header-1x3-Male-2.54mm	Jumper, 3-Pin	JVE	21B1264-03S10-01G-6/3	JP1	1
CON-Tyco-1473005-1-200-0.6mm	SODIMM Connector	Tyco	1473005-1	X1	1
CON-SwitchCraft-RAPC722X	Power Jack	SwitchCraft	RAPC722X	X2	1
CON-TerminalBlock-1x2-3.50	Power Connector 3.5mm pitch	Tyco	284512-2	X3	1
CON-TerminalBlock-1x2-3.50-Mate	Power Connector Mate 3.50mm pitch	Tyco	284506-2	Power Connector	1
CON-Molex-47589-0001-5-0-65	Micro USB OTG Connector	Molex	47589-0001	X4	1
CON-Pulse-J00-0065NL	RJ45 Connector	Pulse	J00-0065NL	X5	1
CON-USB-2x-Type-A	USB 2.0 double row, Type A	Mill-Max Manufacturing Corp	896-43-008-90-000000	X6	1
CON-Omron-XF2M-4015-1A-40-0.5mm	RGB Connector	Omron	XF2M-4015-1A	X7	1
CON-Amphenol-101-00581-59	CON-Amphenol-101-00581-59	Amphenol	101-00581-59	X8	1
CON-Header-2x25-Male-2.54mm	Header, 2x25 Pins, 2.54 mm pitch	Samtec	TSW-125-07-G-D	X9	1
D-DiodeInc-SMBJ5.0CA-13-F-SchottkyTVS-6.4V-62.5A	Bidirectional ESD protection	Diodes Inc.	SMBJ5.0CA-13-F	D1	1
D-DiodeInc-SMD-B130-13-F-30V-1A	Diode Schottky, SMD, B130-13-F, 30V, 1A	Diodes Inc.	B130-13-F	D2	1
D-Semtech-RClamp0504S-ESD-5V-+/-8KV(Contact)-+/-15KV(Air)	TVS Array low cap	Semtech	RClamp0504S	D3	1
D-Philips-BAT54C-Schottky-30V-200mA	BAT54 Schottky Diode	Philips	BAT54C	D4	1
D-TI-TPD2EUSB30DRTR	2 Channel Protection for Super Speed USB3.0	Texas Instruments	TPD2EUSB30DRTR	D5	1
IC-DiodeInc-AP6502SP-13	Sync DC/DC Buck Converter, 2A, 340KHz	Diodes Inc.	AP6502SP-13	IC1	1
IC-TI-TPS2042BD	Dual High Side Switch With OC_DET 500mA/CH	Texas Instruments	TPS2042BD	IC3	1
IC-ST-M41T0M6	RTC M41T0M6	ST Microelectronics	M41T0M6	IC4	1
Lemv-39R-10A-25%	Power Supply FB 10A	Steward	35F0121-0SR-10	L1, L2	2
L-Murata-DLW21SN900SQ2-90R@100MHz-330mA-25%	Common Mode Choke High Speed 90R 330mA	Murata	DLW21SN900SQ2L	L10, L11	2
L-TDK-VLP8040T-100M-10uH-3.2A-20%-32mohm	Power Inductor 10uH, 3.2A, 38mOhm (DRC), Shielded, 8mm X 7mm	TDK	VLP8040T-100M	L3	1
L-220R@100MHz-2A-25%-0603	220R@100MHz 2A EMI FILTER	Generic	220R@100MHz-2A-25%-0603	L4, L6, L7, L8, L9, L12, L13	7
L-33R@100MHz-2A-0805	EMI Filter, Ferrite bead, 33R@100MHz, 2A	Generic	33R@100MHz-2A-0805	L5	1
LED-Avago-HSMG-C190-GREEN-0603	Surface mount LED green 20mA	Avago	HSMG-C190	LED1, LED2	2
R-0R-63mW-1%-0603	Resistor 0 ohm 63mW 1% 0603	Generic	0R-63mW-1%-0603	R1, R15, R23, R24, R25, R26, R27, R36, R39, R42, R54, R55, R56, R70, R71	15
R-150R-63mW-1%-0603	Resistor 150 ohm 63mW 1% 0603	Generic	150R-63mW-1%-0603	R12, R13	2
R-15KR-63mW-1%-0603	Resistor 15 Kohm 63mW 1% 0603	Generic	15KR-63mW-1%-0603	R19, R20, R21, R22	4
R-1KR-63mW-5%-0603	Resistor 1 Kohm 63mW 5% 0603	Generic	1K-63mW-5%-0603	R2, R18	2
R-33KR-63mW-5%-0603	Resistor 33 Kohm 63mW 5% 0603	Generic	33K-63mW-5%-0603	R28	1
R-68KR-63mW-5%-0603	Resistor 68 Kohm 63mW 5% 0603	Generic	68K-63mW-5%-0603	R29, R30, R31, R32	4
R-6.8KR-63mW-1%-0603	Resistor 6.8Kohm 63mW 1% 0603	Generic	6.8KR-63mW-1%-0603	R4	1
R-4.7KR-63mW-5%-0603	Resistor 4.7 Kohm 63mW 5% 0603	Generic	4.7KR-63mW-5%-0603	R40, R41	2
R-26.1KR-63mW-1%-0603	Resistor 26.1 Kohm 63mW 1% 0603	Generic	26.1KR-63mW-1%-0603	R5	1
R-10K-63mW-1%-0603	Resistor 10 Kohm 63mW 1% 0603	Generic	10K-63mW-1%-0603	R6, R14, R16, R49	4
R-22R-63mW-5%-0603	Resistor 22 ohm 63mW 5% 0603	Generic	22R-63mW-5%-0603	R37, R38, R61, R62, R63, R64, R65, R66, R67, R68, R69	11
R-100K-63mW-5%-0603	Resistor 100 Kohm 63mW 5% 0603	Generic	100KR-63mW-5%-0603	R7, R33, R34, R35, R43, R44, R45, R46, R47, R50, R51, R52, R53	13
R-50R-63mW-1%-0603	Resistor 50 ohm 63mW 1% 0603	Generic	50R-63mW-1%-0603	R8, R9, R10, R11	4
R-470K-63mW-5%-0603	Resistor 470 Kohm 63mW 5% 0603	Generic	470KR-63mW-5%-0603	R3	1
R-560R-63mW-5%-0603	Resistor 560 ohm 63mW 5% 0603	Generic	560R-63mW-5%-0603	R17	1
R-0R-63mW-1%-1206	Resistor 0 ohm 63mW 5% 1206	Generic	0R-63mW-1%-1206	R48	1
RA-22R-63mW-5%-4x0603	Resistor Array 22 R 63mW 5% 4x0603	Generic	22R-63mW-5%-4x0603	RA1, RA2, RA3, RA4, RA5, RA7, RA8, RA9, RA10, RA11, RA12, RA13, RA14, RA17, RA18	15
T-DiodeInc-DMG1012T	N-Channel 20V (D-S) MOSFET	Diodes Inc.	DMG1012T-7	T1	1
BAT-Keystone-3000	Battery Holder	Keystone	3000	BAT1	1
OSC-MC-CC4V-T1A-32.768KHz-30ppm	Quartz 32.768kHz	Micro Crystal	CC4V-T1A	OSC1	1
PCB_Viola	PCB	Generic	PCB_Viola_V1.1.001	Viola PCB	1
Toradex_Logo	Toradex_Logo	Generic	No Physical Component	MECH1, MECH2	2
MECH-Fiducial	Fiducial	Generic	No Physical Component	MECH3, MECH4, MECH5, MECH6, MECH7, MECH8, MECH9	7
MECH-Fastener-PennEngg-SMTSO-M1.6-3ET	PCB Fastener	Penn Engineering	SMTSO-M1.6-3ET	PCB Fasteners	2
Not Assembled		Generic	No Physical Component	PCB Fastener Screws M1.6	2
Not Assembled		Generic	No Physical Component	C32	1