

Bill of Material

STEVAL-IHP007V1 ST7580 - Power Line Modem

PartType	MI Code	Designator	Footprint	Description	Quantity	Manufacturer	Part Type
CR2032/1HF		BT1	BATT_BACKUP	Backup Litium Battery 3V 220mAh	1	Panasonic	CR2032/1HFE
100n 16V	MI0156	C1, C2, C4, C7, C10, C12, C13, C15, C19, C20, C24, C28, C29, C31, C37, C38, C39	0402_C	Ceramic Capacitor 100n 16V 0402	17	AVX	0402YG104ZAT2A
10p 50V	MI0207	C3, C6	0402_C	Ceramic Capacitor 10p 50V X7R 5%	2	AVX	04025A100DAT2A
22p 50V		C5, C9	0402_C	Ceramic Capacitor 22p 50V	2	Murata	GRM1555C1H220JZ01D
10u 16V	MI0136	C8, C11, C14, C18, C21, C23	0805S_C	Ceramic Capacitor 10u 16V X5R 10%	6	AVX	GRM21BR61C106KE15L
4u7 16V		C16	0805S_C	Ceramic Capacitor 4u7 16V 0805 +/-15%	1	Murata	GRM21BR61C475KA88L
100p 25V		C17, C22, C25, C34	0402_C	Ceramic Capacitor 100p 25V 0402	4	AVX	04023A101JAT2A
27p 50V		C26	0402_C	Ceramic Capacitor 27p 50V COG 0402	1	Murata	GRM1555C1H270JA01D
4.7p 50V		C27	0402_C	Ceramic Capacitor 4.7p 50V COG 0402	1	Murata	GRM1555C1H4R7BA01D
10u 50V		C30	1210	Ceramic Capacitor 10u 50V 1210 X7R	1	Taiyo Yuden	UMK325BJ106MM-T
220n X2 250Vac		C32	RADX2-152	Metallized Polyester Film Dielectric 220n 250Vac pitch 15mm	1	Panasonic	ECQU2A224ML
1n 50V		C33	0402_C	Ceramic Capacitor 1n 50V X7R 10%	1	AVX	04025C102KAT2A
10n 50V		C35	0603S_C	Ceramic Capacitor 10n 50V X7R 10%	1	Kemet	C0603C103K5RAC
18n 50V		C36	0603S_C	Ceramic Capacitor 18n 50V	1	Murata	C0603C183K5RACTU
STTH1L06A	MI0020	D1	DO214AA	FAST RECOVERY DIODE	1	ST	STTH1L06A
STPS1L30A		D2, D3	SMA_DIODE	LOW DROP POWER SCHOTTKY RECTIFIER 1A 30V 0.3V	2	ST	STPS1L30
SM6T15CA		D4	SMB	TRANSIL Diode 15V 600W	1	ST	SM6T15CA
SMAJ5.0CA		D5	DO214	TVS Bi-Directional Diode 5V 400W DO214AC	1	ST	SMAJ5.0CA
90121-0765		J2	SIP5_RA	Male Connector 2.54mm pitch SIL RA	1	MOLEX	90121-0765
010883121		J3, J4	FKV12LN_STRIP_MIRROR		2	Molex	010883121
BLM21PG300SN1		L1	0805S	EMI Filter 30R 100 MHz 0805	1	Murata	BLM21PG300SN1
BLM21PG331SN1		L2	0805S	EMI Filter 330R 100 MHz	1	Murata	BLM21PG331SN1
BLM18AG102SN1D	MI0160	L3	0603S	EMI Filter BLM 1K 100MHz 400mA	1	Murata	BLM18AG102SN1D
10u 2.0A		L4	IND_WE-PD3	Inductor 10u 2.0A 74454010	1	Würth Elektronik	74454010
100u 350mA		L5	IND_6x6	Inductor 100u 350mA	1	Epcos	B82462A4104K
HSMF-C155		LD1, LD2	HSMF-C655	LED Bicolor Verde/Rosso SMD	2	AVAGO	HSMF-C155
2N7002	MI0127	Q1	SOT23	N-channel TrenchMOS FET	1	Philips	2N7002
BC847	MI0135	Q2	SOT23A	NPN 45 V, 100 mA general-purpose transistors	1	Infineon	BC847
10K	MI0167	R2, R7, R8, R9, R10, R12, R13, R14, R17, R20, R38	0402_R	Resistor 10K 0.0625W	11	TE Connectivity	CRG0402F10K
560R		R4, R6, R39, R40	0603S_R	Resistor 560R 0.1W 1%	4	TE Connectivity	CRG0603F560R
330R		R5, R16	0402_R	Resistor 330R 0.0625W	2	TE Connectivity	CRG0402F330R
1M		R11	0402_R	Resistor 1M 0.0625W	1	TE Connectivity	CRG0402F1M0
130R		R15	0402_R	Resistor 130R 0.0625W	1	TE Connectivity	CRG0402F130R
33K		R18, R25, R26	1206S_R	Resistor 33K 0.33W 1%	3	Vishay	CRCW120633K0FKEA
22K		R19, R29	0402_R	Resistor 22K 0.0625W 1%	2	TE Connectivity	CRG0402F22K

33K		R21, R30	0402_R	Resistor 33K 0.0625W	2	TE Connectivity	CRG0402F33K
100K	MI0229	R22	0805S_R	Resistor 100K 0.125W 1%	1	TE Connectivity	CRG0805F100K
24K		R23, R31	0402_R	Resistor 24K 0.0625W 1%	2	TE Connectivity	CRG0402F24K
47K		R24, R33	0402_R	Resistor 47K 0.0625W 0.1%	2	Vishay	CRG0402F47K
1K5		R27, R35	0402_R	Resistor 1K5 0.063W 1%	2	TE Connectivity	CRG0402F1K5
5K1		R28	0402_R	Resistor 5K1 0.0625W 1%	1	Vishay	CRCW04025K10FKED
10M		R32	0402_R	Resistor 10M 0.0625W	1	TE Connectivity	CRCW040210M0FKED
150R		R34	0603S_R	Resistor 150R 0.1W 1%	1	TE Connectivity	CRG0603F150R
22R		R36, R37	0402_R	Resistor 22R 0.063W 1%	2	TE Connectivity	CRG0402F22R
4 x 10K	MI0069	RP1, RP2, RP3	RESPACK_CAT/CAY_16	Respack SMD 4 x 10K 0.25 5%	3	Bourns	CAT16-103J4LF
IC-STM32F103CBT7		U1	LQFP48_STM	STM32 ARM-based 32-bit MCU with 64 Kbytes Flash, 36-pin VFQFPN, Industrial Temperature	1	ST	STM32F103CBT7
ST7580		U2	VFQFPN48_7x7x1	B-FSK, B-PSK, Q-PSK, 8-PSK Multi Mode Power Line Networking System on Chip	1	ST	ST7580
HCPL-181-000E		U3	SO-4	Phototransistor Optocoupler SMD Mini-Flat Type	1	Avago Tech.	HCPL-181
USBLC6-2	MI0211	U4	SOT666	USB Very Low Capacitance ESD Protection	1	ST	USBLC6-2P6
MC-306		X1	TPSM32A	Crystal 32.768 KHz	1	Epson Toyocom	MC-306
FOXSDLF/080-20		X2	XTAL2	SMD Crystal 8.000 MHz	1	EuroQuartz	8.000MHz 49USMX/30/50/-40+85/18pF/ATF
T60403-K5024-X044		ZT1	TRF_VAC5024X044	Signal Transformer 1:1	1	VAC	T60403-K5024-X044