



Bill of Materials for the ONMCU DIL 5V0 CTRL BOARD

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1,C2,C3,C6,C7,C10,C11,C14,C22	9	Ceramic Capacitor SMD	100NF, 50V, X7R	10%	0603	Murata	GCM188R71H104KA57	Yes	Yes
C9,C12,C17,C18	4	Ceramic Capacitor SMD	2.2UF, 10V, X7R	10%	0603	Murata	GRM188R71A225KE15D	Yes	Yes
C19,C20,C221	3	Ceramic Capacitor SMD	10UF, 10V, X7R	10%	0805	Murata	GCM21BR71A106KE22L	Yes	Yes
C15,C16	2	Ceramic Capacitor SMD	12PF, 50V, NPO	5%	0603	Kemet	C0603C120J5GAC	Yes	Yes
R1	1	Resistor SMD	0.0R	-	0603	YAGEO	RC0603JR-070RL	Yes	Yes
R4,R5	2	Resistor SMD	39R	1%	0603	YAGEO	RC0603FR-0739RL	Yes	Yes
R6,R7	2	Resistor SMD	470R	1%	0603	Vishay	RC0603JR-07470RL	Yes	Yes
R12,R13	2	Resistor SMD	5.1K	1%	0603	Panasonic	ERJ-3EKF5101V	Yes	Yes
R8,R9,R10	3	Resistor SMD	10K	1%	0603	Panasonic	ERJ-3EKF1002V	Yes	Yes
R11	1	Resistor Array SMD	100R	5%	1206	Phycomp	235003510101	Yes	Yes
L1,L2	2	Ferrite Bead SMD	0.25Ohm, 500mA, 600Ohm	-	0805	TAIYO YUDEN	BK2125HM601-T	Yes	Yes
J1	2	SIL Header	17 pins, 2.54mm pitch	-	X17APH	SAMTEC	TSW-106-08-F-S-RA	Yes	Yes
USB	1	USB-C Connector Receptacle	Hybrid Type	-	USB4105	GCT	USB4105-GF-A-120	Yes	Yes
RST	1	Switch SPST-NO	5x3mm, 50mA	-	swPB_mini	C&K COMPONENTS	KMR221G LFS	Yes	Yes
D1	1	LED SMD Orange	20 mA	-	0603	Broadcom	HSMD-C191	Yes	Yes
D2	1	LED SMD Green	20 mA	-	0603	Broadcom	HSMG-C191	Yes	Yes
D3	1	ESD Protection Array	NUP2114UCMR6	-	TSOP6	onsemi	NUP2114UCMR6T1G	Yes	Yes
Q1,Q2	2	P-Channel MOSFET	20V, 2A, 60mOhm	-	SOT23	onsemi	FDN340P	Yes	Yes
U1	1	MCU, 32BIT, AVR32	AT32UC3C2512C	-	QFN64	Microchip	AT32UC3C2512C-Z2URCT	Yes	Yes
U2	1	LDO, 5.0V, 100mA	NCV4264-2CST50	2%	SOT223	onsemi	NCV4264-2CST50T3G	Yes	Yes
U3	1	LDO, 3.3V, 800mA	MC33269DR2-3.3G	2%	SOIC8	onsemi	MC33269DR2-3.3G	Yes	Yes
X1	1	SMD Crystal	20MHz, 12pF	20ppm	3.2X2.5MM	Quantek	QC3220.0000F12B12M	Yes	Yes