

基板上部品番号	個数	製品名や各種定数	製品型番	製造社名	部品概要
C1, 2, 3, 4, 5, 8, 9, 11, 14	9	0.1u	GRM219F11H104ZA01D	Murata Electronics	チップコンデンサ (*1)
C6, 7	2	22p	GRM21A5C2D220JW01D	Murata Electronics	チップコンデンサ
C10	1	0.22u	GCM21BR71H224KA37K	Murata Electronics	チップコンデンサ
C12, 13, 15	3	1u	GRM21BC72A105KE01	Murata Electronics	チップコンデンサ
D1	1	L	PG1112H-TR (*2)	STANLEY ELECTRIC	Lチカ用LED
D2	1	TX	PG1112H-TR (*2)	STANLEY ELECTRIC	シリアル通信時インジケータ用LED
D3	1	RX	PG1112H-TR (*2)	STANLEY ELECTRIC	シリアル通信時インジケータ用LED
D4	1	ON	PG1112H-TR (*2)	STANLEY ELECTRIC	電源投入インジケータ用LED
D5	1	1N4148W	1N4148W-7-F	Diodes Incorporated	汎用ダイオード
D6, 7	2	RB160MM-30	RB160MM-30TR	Rohm Semiconductor	ショットキーダイオード
F1	1	MF-MSMF050-2	MF-MSMF050-2	Bourns	リセットブルヒューズ (Ih=500[mA], It=1[A])
J1	1	5077CR-16SMC2	5077CR-16SMC2-BK-TR	Neltron Industrial	USB3.1 Type-C型コネクタ
J2	1	AVR-ISP-6	PH-2x7SG	Useconn Electronics	AVR ICSP用ピンヘッダ
J3	1	18742	18742	4UCON	DCジャック (20[V], 4[A]絶対定格)
J4	1	Conn_02x19_Female	FHU-2x42SG	Useconn Electronics	GPIO用ピンソケット (*3)
J5	1	Conn_02x12_Female	FHU-2x42SG	Useconn Electronics	GPIO用ピンソケット (*3)
J6	1	Conn_02x15_Female	FHU-2x42SG	Useconn Electronics	GPIO用ピンソケット
L1	1	MH2029-300Y	MH2029-300Y	Bourns	フェライトビーズ
Q1	1	IRLML6402	IRLML6402TRPBF	International Rectifier	Pch型MOSFET
R1, 2, 3	3	10k	RK73B2ATTD103J	KOA	チップ抵抗 (0.25W)
R4, 5, 6, 7	4	1k	RK73B2ATTD102J	KOA	チップ抵抗 (0.25W)
R8, 9	2	5.1k	RK73B2ATTD512J	KOA	チップ抵抗 (0.25W)
R10	1	33k	RK73B2ATTD333J	KOA	チップ抵抗 (0.25W)
SW1	1	B3FS-1050P	B3FS-1050P	Omron Electronics	タクトスイッチ
U1	1	ATmega2560-16AUR	ATmega2560-16AUR	Atmel/Microchip	マイコン
U2	1	FT232RL	FT232RL-REEL	FTDI	USB/シリアル変換IC
U3	1	LM340MPX-5.0/NOPB	LM340MPX-5.0/NOPB	Texas Instruments	5Vレギュレータ (1.5[A]絶対定格)
U4	1	TLV75733PDBVR	TLV75733PDBVR	Texas Instruments	3.3Vレギュレータ (1.0[A]絶対定格)
Y1	1	FA238-16MHz	FA-238 16.0000MB-K3	EPSON	水晶振動子

\*1: 既にディスコン(製造中止)しているため、次回以降の生産時は同社製の代替品に切替予定 (参考: 条件=0.1uF, 50V, X7R, 2012Metric)。

\*2: ロットによってはOpto Supply製のOSG80805C1Cの場合あり。もしくは同等品 (参考: 条件= IF=20[mA](typ), VF=2.1[V](typ), 2012Metric)。

\*3: ピンソケットの外側のピン配置はArduino Unoと互換。TinyMEGA2560C-PinMapping.pngを参照。

基板上部品番号	個数	フットプリント - 特記なしはKiCadでの名称	Digikey通販コード	秋月通販コード
C1, 2, 3, 4, 5, 8, 9, 11, 14	9	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder	N/A	P-13372 (50個/袋)
C6, 7	2	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.41mm_HandSolder	490-14650-1-ND	N/A
C10	1	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.42mm_HandSolder	490-13311-1-ND	N/A
C12, 13, 15	3	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.43mm_HandSolder	490-14464-1-ND	P-13699 (10個/袋)
D1	1	LED_SMD:LED_0805_2012Metric_Pad1.15x1.40mm_HandSolder	404-1021-1-ND	I-09340 (20個/袋)
D2	1	LED_SMD:LED_0805_2012Metric_Pad1.15x1.41mm_HandSolder	D1に同じ	D1に同じ
D3	1	LED_SMD:LED_0805_2012Metric_Pad1.15x1.42mm_HandSolder	D1に同じ	D1に同じ
D4	1	LED_SMD:LED_0805_2012Metric_Pad1.15x1.43mm_HandSolder	D1に同じ	D1に同じ
D5	1	SOD123(F)-HandSolder:D_SOD-123	1N4148W-FDICT-ND	I-07084 (40個/袋)
D6, 7	2	SOD123(F)-HandSolder:D_SOD-123	RB160MM-30CT-ND	I-01398 (10個/袋)
F1	1	Fuse:Fuse_1812_4532Metric_Pad1.30x3.40mm_HandSolder	MF-MSMF050-2CT-ND	N/A
J1	1	5077CR-16SMC2-BK-TR:GCT_USB4105-GF-A (gct.coから)	2073-USB4105-GF-ACT-ND	C-14356
J2	1	Connector_PinHeader_2.54mm:PinHeader_2x03_P2.54mm_Vertical	N/A	C-00166
J3	1	CUI_PJ-102A:CUI_PJ-102A (cuidevices.comから)	CP-102AH-ND	C-09408
J4	1	Connector_PinSocket_2.54mm:PinSocket_2x19_P2.54mm_Vertical	N/A	C-05780
J5	1	Connector_PinSocket_2.54mm:PinSocket_2x12_P2.54mm_Vertical	J4に同じ	J4に同じ
J6	1	Connector_PinSocket_2.54mm:PinSocket_2x15_P2.54mm_Vertical	J4に同じ	J4に同じ
L1	1	Inductor_SMD:L_0805_2012Metric_Pad1.15x1.40mm_HandSolder	MH2029-300YCT-ND	N/A
Q1	1	Package_TO_SOT_SMD:SOT-23_Handsoldering	IRLML6402PBFCT-ND	I-02553 (10個/袋)
R1, 2, 3	3	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder	2019-RK73B2ATTD102JCT-ND	N/A
R4, 5, 6, 7	4	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.41mm_HandSolder	2019-RK73B2ATTD103JCT-ND	N/A
R8, 9	2	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.42mm_HandSolder	2019-RK73B2ATTD512JCT-ND	N/A
R10	1	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.43mm_HandSolder	2019-RK73B2ATTD333JCT-ND	N/A
SW1	1	B3FS-1050P:B3FS-1012 (ultralibrarian.comから)	Z5350CT-ND	P-10527
U1	1	Package_QFP:TQFP-100_14x14mm_P0.5mm	ATMEGA2560-16AURCT-ND	N/A
U2	1	Package_SO:SSOP-28_5.3x10.2mm_P0.65mm	768-1007-1-ND	I-01739
U3	1	Package_TO_SOT_SMD:SOT-223-3_TabPin2	LM340MPX-5.0/NOPBCT-ND	N/A
U4	1	Package_TO_SOT_SMD:SOT-23-5_HandSoldering	296-50414-1-ND	N/A
Y1	1	Crystal:Crystal_SMD_SeikoEpson_FA238-4Pin_3.2x2.5mm_HandSoldering	SER4046CT-ND	P-02457 (4個/袋)

基板上部品番号	個数	データシート - もしくは関連資料
C1, 2, 3, 4, 5, 8, 9, 11, 14	9	<a href="http://akizukidenshi.com/download/ds/murata/grm219f11h104za01.pdf">http://akizukidenshi.com/download/ds/murata/grm219f11h104za01.pdf</a>
C6, 7	2	<a href="https://psearch.jp.murata.com/capacitor/product/GRM21A5C2D220JW01%23.html">https://psearch.jp.murata.com/capacitor/product/GRM21A5C2D220JW01%23.html</a>
C10	1	<a href="https://psearch.jp.murata.com/capacitor/product/GCM21BR71H224KA37%23.html">https://psearch.jp.murata.com/capacitor/product/GCM21BR71H224KA37%23.html</a>
C12, 13, 15	3	<a href="https://psearch.jp.murata.com/capacitor/product/GRM21BC72A105KE01%23.html">https://psearch.jp.murata.com/capacitor/product/GRM21BC72A105KE01%23.html</a>
D1	1	<a href="https://media.digikey.com/pdf/Data%20Sheets/Stanley%20Electric%20PDFs/BR1112H.pdf">https://media.digikey.com/pdf/Data%20Sheets/Stanley%20Electric%20PDFs/BR1112H.pdf</a>
D2	1	
D3	1	
D4	1	
D5	1	<a href="https://www.diodes.com/assets/Datasheets/ds30086.pdf">https://www.diodes.com/assets/Datasheets/ds30086.pdf</a>
D6, 7	2	<a href="https://fscdn.rohm.com/jp/products/databook/datasheet/discrete/diode/schottky_barrier/rb160mm-30tr-j.pdf">https://fscdn.rohm.com/jp/products/databook/datasheet/discrete/diode/schottky_barrier/rb160mm-30tr-j.pdf</a>
F1	1	<a href="https://www.bourns.com/docs/Product-Datasheets/mfmsmf.pdf">https://www.bourns.com/docs/Product-Datasheets/mfmsmf.pdf</a>
J1	1	<a href="https://www.amphenol-icc.com/media/wysiwyg/files/drawing/12401610e4x2a.pdf">https://www.amphenol-icc.com/media/wysiwyg/files/drawing/12401610e4x2a.pdf</a>
J2	1	<a href="http://akizukidenshi.com/download/ds/useconn/PH-2xXXSG-AD.pdf">http://akizukidenshi.com/download/ds/useconn/PH-2xXXSG-AD.pdf</a>
J3	1	<a href="https://www.cuidevices.com/product/resource/pi-102a.pdf">https://www.cuidevices.com/product/resource/pi-102a.pdf</a>
J4	1	<a href="http://akizukidenshi.com/download/ds/useconn/FHU-2xXXSG-AD.pdf">http://akizukidenshi.com/download/ds/useconn/FHU-2xXXSG-AD.pdf</a>
J5	1	
J6	1	
L1	1	<a href="https://www.bourns.com/docs/Product-Datasheets/mh.pdf">https://www.bourns.com/docs/Product-Datasheets/mh.pdf</a>
Q1	1	<a href="https://www.infineon.com/dgdl/irlml6402pbf.pdf?fileId=5546d462533600a401535668d5c2263c">https://www.infineon.com/dgdl/irlml6402pbf.pdf?fileId=5546d462533600a401535668d5c2263c</a>
R1, 2, 3	3	<a href="https://www.koaglobal.com/-/media/Files/KOA_Global/product/commonpdf/rk73b.pdf">https://www.koaglobal.com/-/media/Files/KOA_Global/product/commonpdf/rk73b.pdf</a>
R4, 5, 6, 7	4	
R8, 9	2	
R10	1	
SW1	1	<a href="https://omronfs.omron.com/ja_JP/ecb/products/pdf/b3fs.pdf">https://omronfs.omron.com/ja_JP/ecb/products/pdf/b3fs.pdf</a>
U1	1	<a href="https://ww1.microchip.com/downloads/en/DeviceDoc/Atmel-2549-8-bit-AVR-Microcontroller-ATmega640-1280-1281-2560-2561_datasheet.pdf">https://ww1.microchip.com/downloads/en/DeviceDoc/Atmel-2549-8-bit-AVR-Microcontroller-ATmega640-1280-1281-2560-2561_datasheet.pdf</a>
U2	1	<a href="https://www.ftdichip.com/Products/ICs/FT232RL.htm">https://www.ftdichip.com/Products/ICs/FT232RL.htm</a>
U3	1	<a href="https://www.ti.com/lit/ds/symlink/lm340.pdf">https://www.ti.com/lit/ds/symlink/lm340.pdf</a>
U4	1	<a href="https://www.ti.com/lit/ds/symlink/tlv757p.pdf">https://www.ti.com/lit/ds/symlink/tlv757p.pdf</a>
Y1	1	<a href="https://support.epson.biz/td/api/doc_check.php?dl=brief FA-238&amp;lang=ja">https://support.epson.biz/td/api/doc_check.php?dl=brief FA-238&amp;lang=ja</a>