

















LibRef 4628	Comment 4628 5A	Designator F1	Footprint FUSE_4628	Quantity	Description 5mm Slim Line Fuse holder
					Quickie IDC Cable-to-Board Connector System Shrouded Vertical Header
52601-S10-8TLF	JTAG	15	AMPHENOL_52601- S10-8TLF	1	Surface Mount, Low Profile, Double Row, 10 Positions, 2.54mm (0.100in)
52601-S10-8TLF	LCD	12	AMPHENOL_52601- S10-8TLF	1	Duickie IDC Cable-to-Board Connector System, Shrouded Vertical Header, Surface Mount, Low Profile, Double Row, 10 Positions, 2.54mm (0.100in) Pitch.
52601-S10-8TLF	SD_BTN	34	AMPHENOL_52601- S10-8TLF	1	Quickie IDC Cable-to-Board Connector System, Shrouded Vertical Header, Surface Mount, Low Profile, Double Row, 10 Positions, 2.54mm (0.100in)
10114828-10104LF	10114828-10104LF	16	AMPHENOL_1011482 8-10104LF	1	Pitch. 1.25mm Wire to Board Wafer, Vertical, Surface Mount, 4 Positions
10114828-10104LF	SMD 4P	В	AMPHENOL_1011482 8-10104LF	1	1.25mm Wire to Board Wafer, Vertical, Surface Mount, 4 Positions
ADS1115IDGSR AMS1086	ADS1115IDGSR AMS1086	U13 U8	SOPSOP490X110-10N TO-252		Julian Model, 41 Ostolis
AMS1117 SMD	AMS1117-3.3V B3D090L-C	AMS1 GDT	S01223		Dán
Battery	Battery BK2125HS101	Battery	PIN CR1220 SMD		Multicell Battery
Battery BLM21SP111SH1D BUTTON	BT	BT1	BEADC2012X105N SW-SMD	í	
Cap	Сар	C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58	Cap 0603	13	Capacitor Capacitor SMD Cer 470nF 10% 16/ X78
CAP C_0603	22p	C60, C61	CAPC160BX90N	7	0603 Capacitor SMD Cer 470nF 10% 16V X78
CAP C_0603 Cap Pol2	100nF tanCap	C62 C44, C45	CAPC1608X90N	1	0603
Ceramic Capacitor	0.1uF	C37	Cap 1206 0603_Cap	Í	Polarized Capacitor (Axial)
Ceramic Capacitor Ceramic Capacitor	1uF 1uF 25V	C1, C38, C59 C40, C41	0603_Cap 0603_Cap		
Ceramic Capacitor Ceramic Capacitor	4.3pF 4.7uF	C7, C8 C4	0603_Cap 0603_Cap		
Ceramic Capacitor Ceramic Capacitor	107 20pF	C64 C5, C6	0805_Cap 0603_Cap		
Ceramic Capacitor	100nF	C2, C3, C63, C65, C66, C67	0603_Cap	6	
Ceramic Capacitor	104	C9, C10, C11, C12, C13, C14, C15, C16, C29, C30, C31, C32, C35, C36	0603_Cap	14	
Ceramic Capacitor	104	C23	0805_Cap		
Ceramic Capacitor Ceramic Capacitor, Polarized Capacitor	105	C24 C21, C22	1206_CAP 1206_CAP		[NoValue], Polarized Capacitor
CH340G	CH340G	U14	SD16	1	High and Low Side Driver
CON 4 EDG5.08 CON 4 EDG5.08	ADC 12 BIT CON 4 EDG5.08	P5, P13 P4, P8	CON 4 4EDG5.08 CON 4 4EDG5.08		Câm Câm
CON 4 EDG5.08 CON 4 EDG5.08	INPUT_4P POWER 4P 5.08	P2 P3	CON 4 4EDG5.08 CON 4 4EDG5.08		Câm Câm
CON 4 EDG5.08 CON 4 EDG5.08	RS485 UART_TIMER_4P	P6 P1	CON 4 4EDG5.08 CON 4 4EDG5.08		Câm Câm
CRYSTAL CUON CAM 470uH	12Mhz	CT1	CRYSTAL-SMD5032		Crystal For all Crystal 2pin.
DIP	4.7uH 5A	L3 D1. D2. D3. D4	CUON CAM 100uH3A	1	Cám
Diode Diode	1N4007 1N4148	D1, D2, D3, D4 D6	SMA - DD-214AC SOD-323	1	
Diode	RS3M	DS .	SMC - DO-214	1	Real Time Clock (RTC) IC
DS3231 FFFHR1C470SP	D53231	IC1 C70	SDIC-16	1	Clock/Calendar - IA ² C, 2-Wire Serial 8- SOIC (0.154, 3.90mm Width) Al Lytic Cap Smt Hb Series, 105c Pb-Fre
	6.3x5.4mm		CAP_EEEHB1C470SP	,	/ 16vdc, 47uf, 6.3x5.4mm, t&r Optoisolator Transistor Output
EL3H7-G HR911105A	EL3H7-G HR911105A	U3, U4, U5, U6 P7	SSOP-4 RJ45	4	3750Vrms 1 Channel 4-SSOP
Inductor	10uH	L4	0603_Inductor	1	BUSI植植 Inductors from EPCOS include SMT Inductors, SMT Power Inductors, Transponder Colls, ISDN Transformers, ISDS. Transformers, DC/DC Converters FF Transformers and SMT Current Sense Transformers. Inductors from EPCOS include SMT Inductors from EPCOS include SMT Inductors, SMT Power Inductors,
Inductor	10uH 1A Inductor	L1	Cap 0603 Cap 0805	,	ITAINSPONDER COIR, ISUN TRANSFORMERS NDSL Transformers, DC/DC Converters RF Transformers and SMT Current Sense Transformers.
inductor_1	AMC7060_701	12	Double inductor	1	Inductor Common mode choke cuon cam xuyen
JP 1x2 2.54 Duc Thang	JP 1x2 2.54	JP4, JP5	JP 1x2 DT		Cám
JP 1x3 2.54 Duc Thang	JP 1x3 2.54	JP1	IP 1x3 DT	1	Cám
LED	LED	L10, L11, LED6, LED7,	0603_LED		LED single color 2 leads
LED	LED	LED8, LED9 LED1, LED2, LED3, LED4, LED5, LED10, LED11, LED12, LED13, LED14	0603 LED	10	LED single color 2 leads
LM1117-3V3	LM1117-3V3	U9, U10	SOT-223		
PCA9306DCTRE4	PCA9306DCTRE4	P9, P10, P11, P12 U7	SOP65P400X130-8N	-	2-bit bidirectional I2C bus and SMBus
Polarized Capacitor	10uF	C25 C26 C27 C28	1206_CAP		voltage-level shifter 8-SM8-40 to 85 Polarized Capacitor
Polarized Capacitor	220 35V	C33, C34 C17, C18	8x12 radial capacitor		Polarized Capacitor
Polarized Capacitor RDER73A104K5E1H03 A	1000 10V 1nF 2KV	C19, C20 C69, C71	8x12 radial capacitor High Voltage Ceramic Capacitors	3	Polarized Capacitor Lead Capacitor X7R_EIA_ with Capacitance: 0.10F and Rated Voltage: 1000Vdc
Res2	Res2	R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R90, R91, R92	RES 0603	24	Resistor
RES_0603	Thick Film	R82, R83, R84, R85 R22, R23, R24, R25.	RES 0603	4	Resistor SMD chip 0.0 Ohm 0.1W 0603
Resistor	1k	R32, R33, R34, R35, R79, R80, R81, R88	0603_Res	13	
		na	0603_Res		
Resistor Resistor	1M 4k3	R6, R10, R14, R18	0603_Res	4	
Resistor Resistor Resistor	1M 4k3 4k7	R6, R10, R14, R18 R1, R4, R5, R8, R9, R12, R13, R16, R17, R26, R27, R28, R29, R36, R37, R38, R39,	0603_Res 0603_Res	21	
Resistor	463	R1, R4, R5, R8, R9, R12, R13, R16, R17, R26, R27, R28, R29, R36, R37, R38, R39, R40, R41, R86, R87 R3, R52, R53, R75	0603_Res 0603_Res 0603_Res	21	
Resistor Resistor Resistor Resistor	4k7	R1, R4, R5, R8, R9, R12, R13, R16, R17, R26, R27, R28, R29, R36, R37, R38, R39, R40, R41, R86, R87 R3, R52, R53, R75, R76, R77, R78, R89 R20, R21, R30, R31	0603_Res 0603_Res	21	
Resistor Resistor Resistor Resistor Resistor Resistor	4k7 10k 100 120 220	R1, R4, R5, R8, R9, R12, R13, R16, R17, R26, R27, R28, R29, R36, R37, R38, R39, R40, R41, R86, R87 R3, R52, R53, R75, R76, R77, R78, R89 R20, R21, R30, R31 R50 R42, R48, R49	0603_Res 0603_Res 0603_Res 0603_Res	21 E 4	
Resistor	4k3 4k7	R1, R4, R5, R8, R9, R12, R13, R16, R17, R26, R27, R28, R29, R26, R37, R38, R39, R40, R41, R86, R87, R3, R52, R53, R75, R76, R77, R78, R89 R7, R71, R78, R89 R85, R48, R49 R7, R11, R15, R19 D7	0603_Res 0603_Res 0603_Res 0603_Res 0603_Res 5MCI5.0A	21 E 4 1 3	
Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor	4k7 10k 100 120 220 510	R1, 84, R5, R8, R9, R12, R13, R16, R17, R26, R27, R28, R29, R26, R37, R38, R39, R40, R41, R86, R87 R3, R52, R53, R75, R76, R77, R78, R89 R20, R21, R30, R31 R50 R42, R48, R49 R7, R11, R15, R19	0603_Res 0603_Res 0603_Res 0603_Res	21 E 4 1 3 4	
Resistor Solder Bridge Solder Bridge Solder Bridge STM32F411RET6	44.7 10k 100 120 220 510 SMCIS GA 9 chm 27 27 27 27 27 27 27 27 27 27 27 27 27	R1, B4, R5, B6, R9, 112, R13, R16, R17, R26, R27, R28, R29, R40, R41, R86, R87 R31, R82, R53, R75, R76, R77, R78, R89 R20, R27, R30, R31 R52, R52, R53, R75, R76, R79, R78, R89 R20, R27, R10, R31 R52, R11, R15, R19 D7 S81, S84 S82, S85	0603_Res 0603_Res 0603_Res 0603_Res 0603_Res 5MCIS_0A Solder Bridge Solder Bridge OFP50P1200X1200X1 60-64N	21 E 4 4 3 3 4 4	ARAMI* Contral* AM STADZE A Manufamellopic IX 32 RE Tal Assinate 1000Res 51928 (512X x 8)
Resistor Solder Bridge Solder Bridge Solder Bridge STM32F411RET6	4k.7 10k 100 120 220 510 SMM/E GA Online STIMQ2F411RET6 TD301D485H-E	R1, B4, R5, R6, R9, 112, R13, R16, R17, R26, R27, R28, R29, R40, R41, R86, R87, R40, R41, R86, R87, R76, R27, R78, R89, R76, R77, R78, R89 R27, R11, R15, R19 D7 S81, S82, R83, S84 S82, S83 S82, S83 S82, S83 S82, S83 S82, S83 S82, S83 S82, S83 S82, S83 S82, S83 S82, S83	0603_Res 0603_Res 0603_Res 0603_Res 0603_Res SMCIS.0A Solder Bridge Solder Bridge	4	Mikrodenetleyici IC 32-Bit Tek ćekirdek 100MHz 512KB (512K x 8) FLASH 64-LOFP (10x10) TTL to RS485
Resistor Solder Bridge Solder Bridge STM32F411RET6	44.7 10x 100 100 120 220 510 540 550 500 510 550 550 550 550 550 550 55	R1, B4, R5, B6, R9, R1, B4, R5, B6, R9, R12, B12, R16, R17, R26, R27, R26, R27, R26, R37, R38, R39, R40, R41, R86, R87, R76, R37, R38, R39, R40, R41, R86, R87, R76, R37, R38, R89, R20, R21, R30, R31, R30 R21, R31, R35, R36, R37, R36, R39, R37, R31, R35, R39, R37, R31, R35, R39, R37, R31, R35, R39, R37, R31, R35, R39, R37, R31, R31, R31, R31, R37, R38, R39, R37, R31, R31, R31, R31, R37, R38, R39, R37, R31, R31, R31, R31, R37, R38, R39, R37, R31, R31, R31, R31, R37, R31, R37, R31, R31, R3	06/03_Res 06/03_Res 06/03_Res 06/03_Res 06/03_Res 06/03_Res 5/06/05_Res 5/06/06_Res 5/06	21 21 8 4 1 3 3 4 1 1 1	Mikrodenetleyici IC 32-Bit Tek Atekirdek 100MHz 51208 (512K x 8) FLASH 64-LOFP (10x10) TTL to RS485 Crystal For all Crystal 2pin.
Resistor Solica Grade Solica Grade Solica Grade Solica Grade Solica Grade Solica Grade Topol D4854-A Thach Anh 2 chan Cam Thach Anh 2 chan Cam	44.7 10k 100 100 100 120 220 510 540 550 500 500 500 500 500 500 500 50	R1, 84, R5, R6, R9, R1, R1, R5, R6, R9, R1, R1, R1, R17, R05, R27, R28, R29, R28, R29, R40, R11, R65, R37, R28, R39, R40, R11, R66, R37, R38, R39, R40, R11, R66, R37, R38, R39, R40, R11, R66, R37, R41, R56, R39, R41, R41, R41, R41, R41, R41, R41, R41	0603_Res 0603_Res 0603_Res 0603_Res 0603_Res 5005_Res 500	4	Mikrodenetileyici ir 32-8it Tek Atekindek 100MHz 512WB (512K x 8) FLASH 64-LDFP (10x10) TTL to BS485 Crystal For all Crystal Zpin. Crystal For all Crystal Zpin.
Resistor Soldor Bridge Soldor Bridge Soldor Bridge Thach Anh 2 chan Cam Thach Anh 3 MD 3225	44.7 10x 100 100 120 220 510 540 550 500 510 550 550 550 550 550 550 55	R1, 84, R5, R6, R9, R1, R1, R5, R6, R9, R1, R1, R1, R17, R05, R27, R28, R29, R05, R37, R28, R29, R06, R17, R28, R29, R06, R17, R28, R29, R06, R17, R28, R29, R06, R17, R28, R29, R29, R29, R29, R29, R29, R29, R29	0603_Res 0603_Res 0603_Res 0603_Res 0603_Res 0603_Res 0603_Res 0604_Res 060	4	Mikrodenetleylet ili 23-88 Tek Arekirdek (100MHz 51288 (512X x 8) FLASH 64-LOTP (10x10) TTL to 85485 Crystal For all Crystal Zpin. Crystal For all Crystal Zpin.
Resistor Resist	48.3 48.7 108. 109. 109. 120. 220. 230. 240. 250. 260. 260. 270. 270. 270. 270. 270. 270. 270. 27	R1, 84, R5, E62, R9, 1412, R13, R1, R1, R17, R17, R17, R12, R13, R17, R28, R27, R28, R29, R20, R21, R28, R29, R27, R21, R21, R215, R29, R27, R21, R215, R215, R29, R29, R29, R29, R29, R29, R29, R29	0603_Res	4	Mikrodenetileyici ir 32-8it Tek Atekindek 100MHz 512WB (512K x 8) FLASH 64-LDFP (10x10) TTL to BS485 Crystal For all Crystal Zpin. Crystal For all Crystal Zpin.
Resistor Resist	44.7 44.7 108 100 100 120 220 510 SMACES DA Ochma 20 ohm STMU29'4118ET6 T03010485H-E BMhz 25Mhz 25Mhz 3215 - 32.7688hz	R1, 84, R5, R6, R9, R1, R1, R5, R6, R9, R1, R1, R1, R17, R05, R27, R28, R29, R05, R37, R28, R29, R06, R17, R28, R29, R06, R17, R28, R29, R06, R17, R28, R29, R06, R17, R28, R29, R29, R29, R29, R29, R29, R29, R29	6603_Ros 660	4	Mikrodonetelycii ili 23.8 lii Tek Arakindek (100MH 5.1288 (5.12K x 8) RLSSH 64.10FP (10x10) TTL to 85485 Crystal For all Crystal Zplin. Crystal For all Crystal Zplin. C70805 C70805
Recistor Recist	693 687 108 109 109 109 109 109 109 109 109 109 109	81, 84, Rs. Sag. Rey. 281, 281, 281, 281, 281, 281, 281, 281,	0603, Rec 6603 Rec 66	4	Mikrodenstelejel II. 22-88 Tek Aschiede (100Met 5128 (512K x 8) FLASH 64-LOPP (10010) TIL 105488 Crystal For all Crystal Zpin. Crystal For all Crystal Zpin. Crystal For all Crystal Zpin. Cr00005 Spilololator Transistor Cusput 25000mm 4 Channel 16-50
Resistor Resist	643 647 100 100 100 100 100 100 100 100 100 10	81, 84, Rs. Say, Rs. Say, Ps. Say, Rs. Say, Ps.	9603, Ric 9603, Re 96	4	Mikrodenethylol (f. 22-88 ř. tek Aseikrdet (100845 ř. 1208 (5) (3) (3) (3) (8) FLASH 64-LOFP (10x10) FIL 10 IS485 Crystal For all Crystal Zpin. Crystal For all Crystal Zpin. C700805 Optolosiutor Transistor Output 2500/kms 4 Channel 16-SO
Recision Recisi	663 100. 100. 100. 100. 100. 100. 100. 100	91, 58, 165, 586, 597 11, 58, 165, 586, 597 128, 527, 528, 527 128, 527, 528, 527 128, 527, 528, 527 128, 527, 528, 527 128, 527, 528, 527 128, 527, 528, 527 128, 527, 528, 527 128, 527, 528, 527 129, 527, 528, 527 129, 527, 528, 528, 528 121, 528, 528, 528, 528 121 121 122 123 124 127 129 129 120 120 121 120 121 120 121 120	6603, Risc 5603, Bisc 5603, Bisc 5603, Bisc 5603, Bisc 5603, Bisc 5603, Bisc 5604,	4	Mikrodenstelejel II. 22-88 Tek Aschiede (100Met 5128 (512K x 8) FLASH 64-LOPP (10010) TIL 105488 Crystal For all Crystal Zpin. Crystal For all Crystal Zpin. Crystal For all Crystal Zpin. Cr00005 Spilololator Transistor Cusput 25000mm 4 Channel 16-50
Recision Recisi	637 106 107 108 109 109 109 109 109 109 109 109 109 109	(1), 34, 68, 68, 69, 71, 72, 72, 73, 74, 74, 74, 74, 74, 74, 74, 74, 74, 74	6603, Res 6603, Bes 6604,	4	Misrodennichyol II: 23 88 Tek Assalande 10 Mare 1708 (17 x 8) PLASH 64 LEAP (10 LOS) PLASH 67 LEAP (10 LOS) PLASH
Recidor Rec	643 467 108 109 109 109 109 109 109 109	(1), 34, 68, 68, 69, 70, 60, 60, 60, 60, 60, 60, 60, 60, 60, 6	6003, Ric 6003 Bits 10003 Bits 10004 Bits 10	4	Mikrodenstelejel II. 22-88 Tek Aschiede (100Met 5128 (512K x 8) FLASH 64-LOPP (10010) TIL 105488 Crystal For all Crystal Zpin. Crystal For all Crystal Zpin. Crystal For all Crystal Zpin. Cr00005 Spilololator Transistor Cusput 25000mm 4 Channel 16-50