

## EEZ Arduino shield BOM (PCB: r1B12b, 2015-12-07)

										GBP/EUR ratio:	1,39393
Qty	Value	Note	Parts	Code	Farnell Unit price	Total	Code	TME Unit price	Total	Combined	
6	Arduino Mega2560 header 1x8-pin	TSW-108-07-T-S	ADCL, ADCH, Comm, PWML, PWMH, X8	1022256	0,081	£0,48	ZL201-08G	0,074	0,44 €	0,44 €	
25	100n	0603	C1, C2, C3, C4, C5, C6, C7, C8, C10, C11, C12, C13, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C26, C28, C29	1759016	0,006	£0,16	CL10B104KO8NNNC	0,006	0,15 €	0,15 €	
1	10u	35V	C14	1850112	0,204	£0,20	EEEFK1V100R	0,210	0,21 €	0,21 €	
2	10u	1206	C25, C34	1759445	0,057	£0,11	CSMD10U1206X	0,060	0,12 €	0,12 €	
1	1F	Supercap 5V	C27	9697497	4,340	£4,34	EECS5R5H105	2,390	2,39 €	2,39 €	
2	10n	1206	C30, C31	1759350	0,034	£0,07	CL31B103KBCNNNC	0,012	0,02 €	0,02 €	
2	18p		C32, C33	2320820	0,019	£0,04	CL21C180JBANNNC	0,010	0,02 €	0,02 €	
2	EEUFC1J220		C4, C9	9692495	0,221	£0,44	EEUFC1J220	0,163	0,33 €	0,33 €	
1	47u	16V	C9	9695664	0,189	£0,19	EEEFK1C470UR	0,190	0,19 €	0,19 €	
1	BAS316		D2	8734275	0,149	£0,15	BAS316	0,020	0,02 €	0,02 €	
1	Arduino Mega2560 header 2x18-pin	TSW-118-07-T-D	Digital	2025426	1,820	£1,82	-			2,54 €	
6	SN74LVCC3245ADBR	SSOP-24	IC1, IC2, IC3, IC4, IC6, IC7	2342537	0,443	£2,66	-			3,71 €	
2	Si8620EC-B-IS		IC10, IC11	2423243	1,560	£3,12	-			4,35 €	
1	PCA21125		IC13	2400445	1,070	£1,07	-			1,49 €	
1	AT25256B		IC14	1841577	0,757	£0,76	25AA256-I/SN	1,090	1,09 €	1,06 €	
1	ENC28J60-I/SS		IC15	1811239	2,240	£2,24	ENC28J60-I/SS	2,540	2,54 €	2,54 €	
1	LD1117ADT33TR		IC5	1087169	0,458	£0,46	LD1117ADT33	0,506	0,51 €	0,51 €	
1	SN74LV125APW		IC8	9592512	0,621	£0,62	SN74LV125APW	0,180	0,18 €	0,18 €	
2	Si8660EC-B-IS1		IC9, IC12	2423343	3,240	£6,48	-			9,03 €	
1	Arduino Mega2560 socket 2x3-pin		ICSP	7991983	0,605	£0,61	ZL262-6DG	0,066	0,07 €	0,07 €	
2	826926-2	2-pin jumper	JP1, JP3	1248140	0,057	£0,11	826926-2	0,100	0,20 €	0,16 €	
1	826926-3	3-pin jumper	JP2	1248141	0,072	£0,07	826926-3	0,110	0,11 €	0,10 €	
1	0R-JUMPA	Zero-ohm jumper	JP4	9233750	0,010	£0,01	SMD0805-0R	0,059	0,06 €	0,01 €	
1	60R@100MHz	Ferrite bead 60R	L1	1635704	0,033	£0,03	LCBA-600	0,027	0,03 €	0,03 €	
1	TFT_320QVT	See bellow	LCD1	-			-				
2	L-934ID	3mm red	LED_CC1, LED_CC2	2217957	0,147	£0,29	L-934ID	0,049	0,10 €	0,10 €	
2	L-934YD	3mm yellow	LED_CV1, LED_CV2	2217961	0,116	£0,23	L-934YD	0,052	0,10 €	0,10 €	
1	L-934MBC	3mm blue	LED_PWR	1142493	0,678	£0,68	L-934MBC	0,470	0,47 €	0,47 €	

# EEZ Arduino shield BOM (PCB: r1B12b, 2015-12-07)

1	Arduino Mega2560 header 1x6-pin	TSW-106-07-T-S	Power	1022255	0,119	£0,12	ZL201-06G	0,052	0,05 €	0,05 €
8	2N7002		Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8	1713823	0,038	£0,30	2N7002	0,034	0,28 €	0,28 €
1	IRLML2246TRPBF		Q9	1888166	0,099	£0,10	IRLML2246TRPBF	0,100	0,10 €	0,10 €
9	100K		R1, R2, R4, R7, R8, R11, R12, R15, R24	1887334	0,017	£0,16	SMD0805-100K-1%	0,008	0,07 €	0,07 €
1	560R		R13	9333363	0,014	£0,01	RC0805FR-07560R	0,007	0,01 €	0,01 €
2	10K		R14, R17	9237755	0,009	£0,02	RC0805FR-0710K	0,006	0,01 €	0,01 €
1	4K7		R16	9333266	0,012	£0,01	RC0805FR-074K7	0,007	0,01 €	0,01 €
4	50R 0.1%		R18, R19, R20, R21	2141727	0,016	£0,06	RC0805FR-0749R9	0,007	0,03 €	0,03 €
1	10R		R22	2380677	0,111	£0,11	RC0805FR-0710R	0,007	0,01 €	0,01 €
1	2K2 1%		R23	2138946	0,024	£0,02	SMD0805-2K2-1%	0,008	0,01 €	0,01 €
1	120R 1%		R25	2447561	0,002	£0,00	CRCW0805120RFKTA BC	0,008	0,01 €	0,00 €
2	200R		R26, R27	9332758	0,016	£0,03	RC0805FR-07200R	0,007	0,01 €	0,01 €
5	240R		R3, R5, R6, R9, R10	9332871	0,016	£0,08	RC0805FR-07240R	0,007	0,03 €	0,03 €
1	LD-BZEN-0903	Buzzer without built-in generator	SG1	-			LD-BZEN-0903	0,477	0,48 €	0,48 €
2	22-23-2021	2-pin 0.1" socket	X1, X5	1462926	0,040	£0,08	MX-22-23-2021	0,060	0,12 €	0,11 €
1	22-23-2041	4-pin 0.1" socket	X2	1462920	0,131	£0,13	MX-22-23-2041	0,100	0,10 €	0,10 €
2	9185106324	10-pin IDC socket	X3, X4	1106832	1,020	£2,04	09185106324	0,820	1,64 €	1,64 €
1	LMJTAB881243M-L	RJ-45 with transformer, LEDs	X6	-			LMJTAB881243M-L	2,220	2,22 €	2,22 €
2	22-23-2031	3-pin 0.1" socket	X9, X11	1462950	0,062	£0,12	MX-22-23-2031	0,070	0,14 €	0,14 €
1	32,768kHz	RTC XTAL	Y1	2449395	0,151	£0,15	32.768K-TC38	0,142	0,14 €	0,14 €
1	25MHz	Ethernet XTAL	Y2	2467741	0,206	£0,21	25.00M-SMDHC49S	0,359	0,36 €	0,29 €
5	Spacer sleeve for LED 12mm		n/a	-			FIX-LEDH-12	0,064	0,32 €	0,32 €
£31,21								15,49 €	36,39 €	

## Optional

1	SMBJ5.0A-TR		D1	2353654	0,071	£0,07	SMBJ5.0A-TR	0,089	0,09 €	0,09 €
1	1301.9316	Tactile switch	SW1	1217765	0,510	£0,51	1301.9316	0,220	0,22 €	0,22 €
£0,58								0,31 €	0,31 €	

## Arduino boards

Arduino Mega2560r3	8-bit MCU, 5V		2212779	28,760	£28,76	A000067	35,900	35,90 €	35,90 €	
Arduino Due	32-bit MCU, 3.3V		2250861	32,940	£32,94	A000062	36,500	36,50 €	36,50 €	
or search for clones on eBay, etc.										

# EEZ Arduino shield BOM (PCB: r1B12b, 2015-12-07)

## 3.2" TFT Touch screen with SD-card (TFT\_320QVT)

<b>Option #1:</b> <a href="http://eckstein-shop.de/32-inch-240x320-TFT-with-Touch-panel_1">http://eckstein-shop.de/32-inch-240x320-TFT-with-Touch-panel_1</a>				-			14,450	14,45 €	14,45 €
<b>Option #2:</b> <a href="http://www.sainsmart.com/sainsmart-3-2-tft-lcd-display-touch-panel-pcb-adapter-sd-slot-for-arduino-2560.html">http://www.sainsmart.com/sainsmart-3-2-tft-lcd-display-touch-panel-pcb-adapter-sd-slot-for-arduino-2560.html</a> (SKU:20-011-918)									
<b>Option #3:</b> search on eBay, etc. for 3.2" TFT LCD Display Module + Touch Panel +SD Reader (before buy check model name, screen size and resolution, total physical dimension 65x95mm, 40-pin connector and controller type SSD1289)									
4	Screwed spacer sleeve; 10mm, M2.5 hexagonal; polyamide			-	TFF-M2.5X10/DR182		0,1748	0,70 €	0,70 €
4	Spacer sleeve; 4mm; cylindrical; brass	Internal diameter 2.6mm	Do not use metal spacer!	-	DR315/2.6X4		0,0732	0,29 €	0,29 €
									<b>15,44 €</b>
2	SIL-32 gold plated pin strip	Replacement for TFT display 2x20-pin header (not required if you are satisfied with original connector). See picture <i>EEZ Arduino shield+BP 40-pin connector (replaced).JPG</i>		-	STS-32P-K		1,453	2,91 €	2,91 €
1	Socket 2x20-pin	Socket for TFT display (required only in combination with above mentioned replacement)		-	ZL304-2X20P		2,400	2,40 €	2,40 €

## Cables

1	Ethernet cable: search on eBay, etc. for <i>RJ45 Male to Female Panel Mount Ethernet Network Lan Extension Cable PC</i>								
1	Mega2560: Search on eBay, etc. for <i>USB 2.0 B Male to USB B Female Printer Panel Mount Extension Cable</i>								
1	Due: Search on eBay, etc. for <i>USB 2.0 B Female Panel Mount to USB Micro Cable</i>								
2	FC10300-S	Ribbon cable with IDC connectors, 10x28AWG, 30cm	2217665	0,847	£1,69	FC10300-S	1,210	2,42 €	2,36 €