

Customer Evaluation Board CLRC663 CLEV6630B V2.0

Arrangement: Gregor Vrhovnik (12.4.2016)

Revision: Gregor Vrhovnik (2.6.2016) --> new label for Micro USB (J103)

Revision: Gregor Vrhovnik (25.11.2016) --> new label for IC100, new values for R310, R316, R355, R372, R311, R313, R314, R315, C307, C320, C308, C318, C311, C315, C310, C314

Component	Label	Value	Manufacturer	Footprint	Ref Des	Quantity
connector Micro USB-B	105017-0001	Micro-B	Molex	THT/SMD (Micro-B)	J103	1
quartz crystal	XRCGB27M120F3M10R0	27.12MHz	Murata	4-SMD (2 x 1,6mm)	XT300	1
quartz crystal	NX5032GA-12.000000MHZ	12MHz	NDK	2-SMD	XT200	1
IC – reader	CLRC663		NXP	HVQFN32	IC350	1
IC – uP	LPC1769FBD100		NXP	100-LQFP	IC200	1
IC – REG (LDO)	LT1129IST-5#PBF	5V / 700mA	Linear Technology	SOT-223-3	IC100	1
IC – REG (LDO)	LM3940IMP-3.3	3.3V / 1A	National Semiconductor	SOT-223-3	IC101	1
IC – Reset	MAX811TEUS+T MIC811TUUY ADM811TARTZ		Maxim Micrel Analog Devices	SOT-143B	IC201	1
inductor – ferrite bead	BLM18PG181SN1	180R at 100MHz; 1,5A	Murata	INDC0603	L102	1
inductor	LQW2BHN22NJ03L	22nH	Murata	INDC0805	L300	1
inductor	PM1812-R10K-RC CM453232-R10MLCT	100nH	Bourns	INDC1812	L100	1
inductor	0805CS-471XGLC	470nH / 250mA	Coilcraft	INDC0805	L301, L302	2
connector – PWR JACK	PJ-202A	2,1 x 5,5mm	CUI Inc.	THT	J100	1
transistor Mosfet N	BSH105,215	20V/1A	NXP	SOT-23	T301, T302, T350	3
transistor PNP	BC807	45V/0.5A	NXP	SOT-23	T100	1
diode (bridge)	CDBHM240L	40V/2A	Comchip Technology	4-SMD (MBS-2)	D100	1
diode - ESD	IP4220CZ6		NXP	SOT-457	D101	1
button (switch)	DTSM-32S-B		Multicomp	SMD	SW200, SW201	2

pinheader – JTAG	20021121-00010C4LF FTS-105-01-L-DV	2x5 PIN (M)	FCI Samtec	SMD (R=1,27mm)	J200	1
connector pinheader		1x3 PIN (M) R=2,54	Neltron	THT	J101, J300, J303	3
LED	KP-1608ID	RED	Kingbright	SMD – 0603	LD100, LD201	2
LED	KP-1608SGD	GREEN	Kingbright	SMD – 0603	LD203, LD302	2
LED	KPG-1608SEKC-T	ORANGE	Kingbright	SMD – 0603	LD200	1
LED	KP-1608QBC-D	BLUE	Kingbright	SMD – 0603	LD202, LD301	2
cap. tantalum		10uF/16V		CASE-A	C101, C102	2
cap. tantalum		33uF/10V		CASE-B	C105, C106	2
cap. tantalum		100uF/10V		CASE-B	C300	1
capacitor		100nF		CAPC0402	C205, C206, C207, C208, C209, C210, C211, C212, C213	9
capacitor		12pF		CAPC0603	C323, C324	2
capacitor		15pF		CAPC0603	C201, C202, C203, C204	4
capacitor		100nF		CAPC0603	C100, C103, C104, C107, C110, C200, C214, C301, C303, C350	10
capacitor		470nF		CAPC0603	C354, C355	2
capacitor		1uF		CAPC0603	C108, C109, C352, C353	4
capacitor		6.8uF		CAPC0603	C302	1
capacitor		4.7pF NP0 1%		CAPC0805	C313, C317	2
capacitor		24pF NP0 1%		CAPC0805	C307, C320	2
capacitor		47pF NP0 1%		CAPC0805	C308, C318	2
capacitor		56pF NP0 1%		CAPC0805	C310, C314 C311, C315	2
capacitor		68pF NP0 1%		CAPC0805	C308, C311, C315, C318, C310, C314	4 2
capacitor		180pF NP0 1%		CAPC0805	C312, C316	2
capacitor		1nF NP0 1%		CAPC0805	C306, C321	2
resistor		0R		RESC0603	R101, R218, R229, R231, R235, R319, R320	7
resistor		33R		RESC0603	R215, R217	2
resistor		330R		RESC0603	R226, R306	2
resistor		1k		RESC0603	R206, R210, R212, R221, R222, R312	6

resistor		1k5		RESC0603	R103, R105, R213, R214, R223, R227, R228, R303	8
resistor		2k2		RESC0603	R102	1
resistor		3k3		RESC0603	R208, R220	2
resistor		4k7		RESC0603	R350, R359, R360, R370	4
resistor		10k		RESC0603	R104, R200, R201, R202, R203, R204, R205, R209, R219, R224, R225, R230	12
resistor		100k		RESC0603	R308, R352	2
resistor		0R		RESC0805	R353, R362, R363, R364, R365, R366, R367, R368, R369	9
resistor		3R3 1%		RESC0805	R311, R313, R314, R315	4
resistor		22k		RESC0805	R310, R316	2
resistor		1k		RESC0805	R355, R372	2
Do Not Place (DNP):						
IC – I2C EEPROM	CAT24C128 DNP		ON Semiconductor	8-SOIC	IC202	1
button (switch)	DTSM-32S-B DNP		Multicomp	SMD	SW300	1
connector pinheader		1x3 PIN (M) R=2,54	Neltron	THT	J201	1
connector pinheader		1x4 PIN (M) R=2,54	Neltron	THT	J202, J302	4 2
connector pinheader		1x6 PIN (M) R=2,54	Neltron	THT	J302, J350	2 1
connector pinheader		1x8 PIN (M) R=2,54	Neltron	THT	J301	1
capacitor		100nF DNP		CAPC0603	C351	1
capacitor		TBD DNP NP0 1%		CAPC0805	C307, C320	2
resistor		TBD DNP		RESC0603	R211, R371	2
resistor		0R DNP		RESC0603	R216, R232, R238, R358, R361	5
resistor		10k DNP		RESC0603	R236, R237	2
resistor		TBD DNP		RESC0805	R309, R317	2