

## Gate

**File:** eu-gate, revA  
**Date:** 23JAN16  
**Note:** BOM for gate boards

Part	Pcs	Value	Package	Note	URL
C1-C4, C7, C9-C15	12	100nF	SMD 0603	16V; X7R; ±10%	<a href="http://www.tme.eu/cz/details/cl10b104ko8nnnc/kondenzatory-mlcc-smd-0603/samsung/">http://www.tme.eu/cz/details/cl10b104ko8nnnc/kondenzatory-mlcc-smd-0603/samsung/</a>
C5, C6	2	18pF	SMD 0603	50V; C0G; ±1%	<a href="http://www.tme.eu/cz/details/cl10c180fb8nnnc/kondenzatory-mlcc-smd-0603/samsung/">http://www.tme.eu/cz/details/cl10c180fb8nnnc/kondenzatory-mlcc-smd-0603/samsung/</a>
C8, C16	2	10uF	SMD A	tantal, 16V, ±10%	<a href="http://www.tme.eu/cz/details/t491a106k016at/tantalove-kondenzatory-smd/kemet/">http://www.tme.eu/cz/details/t491a106k016at/tantalove-kondenzatory-smd/kemet/</a>
IC1	1	SN75176AD	SO8		<a href="http://www.tme.eu/cz/details/sn75176ad/integr-obvody-interface-rs232422485/texas-instruments/">http://www.tme.eu/cz/details/sn75176ad/integr-obvody-interface-rs232422485/texas-instruments/</a>
IC1	1	SN75176BD	SO8	substitute	<a href="http://www.tme.eu/cz/details/sn75176bd/integr-obvody-interface-rs232422485/texas-instruments/">http://www.tme.eu/cz/details/sn75176bd/integr-obvody-interface-rs232422485/texas-instruments/</a>
IO0-IO5	6	KK 254, 1x3	THT		<a href="http://www.tme.eu/cz/details/ns25-w3p/signalove-konektory-raster-254mm/ninigi/">http://www.tme.eu/cz/details/ns25-w3p/signalove-konektory-raster-254mm/ninigi/</a>
ISP	1	2x3, 2.54mm	THT		<a href="http://www.tme.eu/cz/details/zl202-6g/konektory-hrebinky/connfly/ds1021-2_3sf1-1/">http://www.tme.eu/cz/details/zl202-6g/konektory-hrebinky/connfly/ds1021-2_3sf1-1/</a>
J1, J2	2	RJ12	THT	6p6c	<a href="http://www.tme.eu/cz/details/mx-95501-2661/konektory-rj/molex/95501-2661/">http://www.tme.eu/cz/details/mx-95501-2661/konektory-rj/molex/95501-2661/</a>
J3	1	KK 254, 1x2	THT		<a href="http://www.tme.eu/cz/details/mx-22-23-2021/signalove-konektory-raster-254mm/molex/22-23-2021/">http://www.tme.eu/cz/details/mx-22-23-2021/signalove-konektory-raster-254mm/molex/22-23-2021/</a>
J4	1	KK 254, 1x4	THT		<a href="http://www.tme.eu/cz/details/mx-47053-1000/signalove-konektory-raster-254mm/molex/47053-1000/">http://www.tme.eu/cz/details/mx-47053-1000/signalove-konektory-raster-254mm/molex/47053-1000/</a>
LD1	1	green	SMD 0603	OSG50603C1E	<a href="http://www.tme.eu/cz/details/osg50603c1e/diody-led-smd-barevne/optosupply/">http://www.tme.eu/cz/details/osg50603c1e/diody-led-smd-barevne/optosupply/</a>
Q1	1	16MHz	SMD, HC49USM	±30ppm; 18pF	<a href="http://www.tme.eu/cz/details/hc49usm-ff3f16.00/kremikove-rezonatory-smd/ilsi/hc49usm-ff3f18-160000/">http://www.tme.eu/cz/details/hc49usm-ff3f16.00/kremikove-rezonatory-smd/ilsi/hc49usm-ff3f18-160000/</a>
R1, R6	2	10kΩ	SMD 0603	0,1W; ±5%	<a href="http://www.tme.eu/cz/details/rc0603jr-0710k/rezistory-smd-0603/yageo/rc0603jr-0710kl/">http://www.tme.eu/cz/details/rc0603jr-0710k/rezistory-smd-0603/yageo/rc0603jr-0710kl/</a>
R2	1	1MΩ	SMD 0603	0,2W; ±5%	<a href="http://www.tme.eu/cz/details/hp03-1m5%25/rezistory-smd-0603/royal-ohm/hp03w5j0105t5e/">http://www.tme.eu/cz/details/hp03-1m5%25/rezistory-smd-0603/royal-ohm/hp03w5j0105t5e/</a>
R3	1	120Ω	SMD 0603	0,1W; ±5%	<a href="http://www.tme.eu/cz/details/rc0603jr-07120r/rezistory-smd-0603/yageo/rc0603jr-07120rl/">http://www.tme.eu/cz/details/rc0603jr-07120r/rezistory-smd-0603/yageo/rc0603jr-07120rl/</a>
R4, R5	2	4.7kΩ	SMD 0603	0,1W; ±5%	<a href="http://www.tme.eu/cz/details/crcw06034k70jnea/rezistory-smd-0603/vishay/">http://www.tme.eu/cz/details/crcw06034k70jnea/rezistory-smd-0603/vishay/</a>
R7	1	470kΩ	SMD 0603	0,2W; ±5%	<a href="http://www.tme.eu/cz/details/hp03-470r5%25/rezistory-smd-0603/royal-ohm/hp03w5j0471t5e/">http://www.tme.eu/cz/details/hp03-470r5%25/rezistory-smd-0603/royal-ohm/hp03w5j0471t5e/</a>
SJ1-SJ4	4	-	-	jumper, solder	
U1	1	ATMega88PA	TQFP32		<a href="http://www.tme.eu/cz/details/atmega88pa-au/mikroprocesory-atmel-avr-smd/atmel/">http://www.tme.eu/cz/details/atmega88pa-au/mikroprocesory-atmel-avr-smd/atmel/</a>

Lines with gray background are not mounted on DPS

## IR

**File:** IR, RevA  
**Date:** 06.03.16  
**Note:** reflective IR boards

Part	Pcs	Value	Package	Note	URL
C1	1	100nF	SMD 0603	16V; X7R; ±10	<a href="http://www.tme.eu/cz/details/cl10b104ko8nnnc/kondenzatory-mlcc-smd-0603/samsung/">http://www.tme.eu/cz/details/cl10b104ko8nnnc/kondenzatory-mlcc-smd-0603/samsung/</a>
J1	1	KK 254, 1x3	THT, 90	Ninigi	<a href="http://www.tme.eu/cz/details/ns25-w3k/signalove-konektory-raster-254mm/ninigi/">http://www.tme.eu/cz/details/ns25-w3k/signalove-konektory-raster-254mm/ninigi/</a>
R1, R3	2	10kΩ	SMD 0603	0,1W; ±5%	<a href="http://www.tme.eu/cz/details/rc0603jr-0710k/rezistory-smd-0603/yageo/rc0603jr-0710kl/">http://www.tme.eu/cz/details/rc0603jr-0710k/rezistory-smd-0603/yageo/rc0603jr-0710kl/</a>
R2, R4	1	220Ω	SMD 0603	0,1W; ±5%	<a href="http://www.tme.eu/cz/details/rc0603jr-07220r/rezistory-smd-0603/yageo/rc0603jr-07220rl/">http://www.tme.eu/cz/details/rc0603jr-07220r/rezistory-smd-0603/yageo/rc0603jr-07220rl/</a>
U1	1	LTH-209-01	THT		<a href="http://www.tme.eu/cz/details/lth209-01/opticka-cidla-pro-plosne-spoje/liteon/lth-209-01/">http://www.tme.eu/cz/details/lth209-01/opticka-cidla-pro-plosne-spoje/liteon/lth-209-01/</a>
Q2	1	BC847	SMD		<a href="http://www.tme.eu/cz/details/bc847ae6327/tranzistory-npn-smd/infineon-technologies/">http://www.tme.eu/cz/details/bc847ae6327/tranzistory-npn-smd/infineon-technologies/</a>

Lines with gray background are not mounted on DPS

## Wires

**File:** Wires for IR boards  
**Date:** 08MAR16  
**Note:** 6x40 cm, 16x30 cm, 26x20 cm

Part	Pcs	Note	URL
NS25-T	300	pin for Ninigi connector	<a href="http://www.tme.eu/cz/details/ns25-t/signalove-konektory-raster-254mm/ninigi/">http://www.tme.eu/cz/details/ns25-t/signalove-konektory-raster-254mm/ninigi/</a>
NS25-G3	100	housing for Ninigi, 3 pins	<a href="http://www.tme.eu/cz/details/ns25-g3/signalove-konektory-raster-254mm/ninigi/">http://www.tme.eu/cz/details/ns25-g3/signalove-konektory-raster-254mm/ninigi/</a>
Wire		3 core flat cable	

**File:** Modbus wire for Gate boards  
**Date:** 08MAR16  
**Note:** 1x20 cm, 2x25 cm, 1x30 cm, 4x35 cm, 1x40 cm, 1x85 cm

Part	Pcs	Note	URL
RJ12W	20	RJ12, 6p6c	<a href="http://www.tme.eu/cz/details/rj12w/konektory-rj/ninigi/">http://www.tme.eu/cz/details/rj12w/konektory-rj/ninigi/</a>
Wire		2 or more twisted pairs	