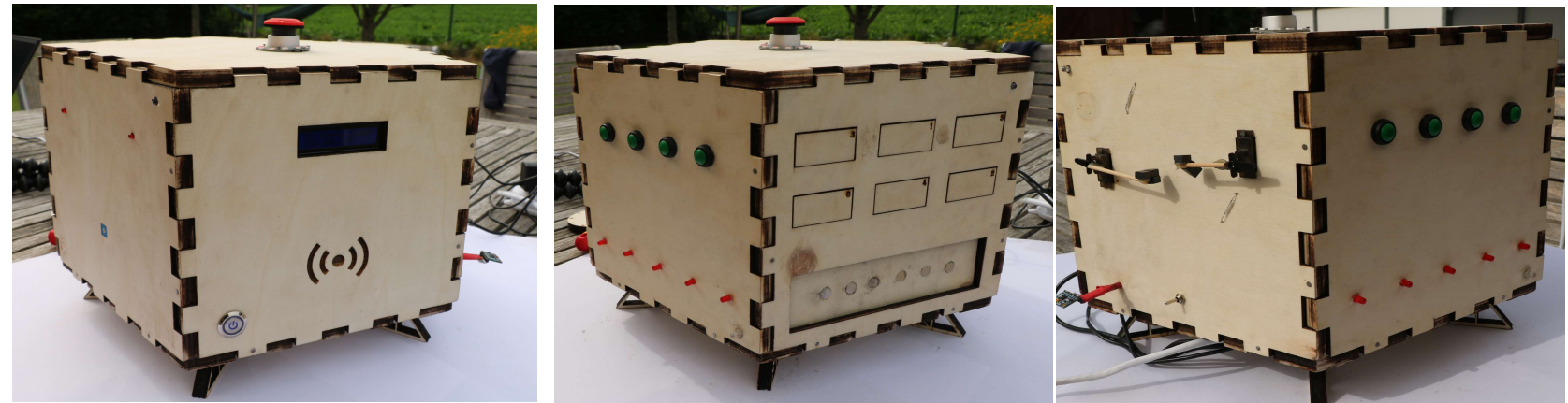


Class 1MCT2  
 First Name: JENS  
 Name LAGAE  
 Project Name : Puzzlbox  
 Assembly Revision : 2  
 Approval Date :  
 Part Count : 137  
 Total Cost : €305



(picture can only be added with END delivery of project!)

Part #	Part Name	Description	Revision	Qty	Supplier	also available from	Units	Unit Cost	Max Cost	Real Cost
1	Raspberry PI4B	Raspberry PI4B 2GB Brains of the game	1	1	<a href="https://www.sossolutions.nl/raspberry-pi-4-model-b-2gb">https://www.sossolutions.nl/raspberry-pi-4-model-b-2gb</a>	<a href="https://www.raspberrypi.com/products/raspberry-pi-4-model-b/">https://www.raspberrypi.com/products/raspberry-pi-4-model-b/</a>	1	\$ 69,85	€ 69,85	
2	raspberry PI T-Splitter	to turn off pi without connection to webservice	1	1	<a href="https://www.sossolutions.nl/assembled-pi-t-cobbler-plus-gpio-breakout">https://www.sossolutions.nl/assembled-pi-t-cobbler-plus-gpio-breakout</a>	<a href="https://webshop.domoticx.nl/index.php?route=product/product&amp;product_id=2087">https://webshop.domoticx.nl/index.php?route=product/product&amp;product_id=2087</a>	1	\$ 9,95	€ 9,95	
3	19Mm Led Light Waterproof Metal Push Button	to turn off pi without connection to webservice	1	1	<a href="https://nl.aliexpress.com/item/1005001877253160.html?spm=a2g0o.productlist.0.0.5a766c30fuXF5&amp;algo_pvid=6c04c2cf-2759-40a8-8a4b-e0235f2c7b2d&amp;algo_exp_id=6c04c2cf-2759-40a8-8a4b-e0235f2c7b2d">https://nl.aliexpress.com/item/1005001877253160.html?spm=a2g0o.productlist.0.0.5a766c30fuXF5&amp;algo_pvid=6c04c2cf-2759-40a8-8a4b-e0235f2c7b2d&amp;algo_exp_id=6c04c2cf-2759-40a8-8a4b-e0235f2c7b2d</a>	<a href="https://www.tinytronics.nl/shop/nl/schakelaars/manuele-schakelaars/drukknoppen-en-schakelaars/metalen-schakelaars">https://www.tinytronics.nl/shop/nl/schakelaars/manuele-schakelaars/drukknoppen-en-schakelaars/metalen-schakelaars</a>	1	\$ 1,90	€ 1,90	
4	Voeding PI	Voeding voor Pi 5,2V 5A 26W MAX	1	2	<a href="https://www.sossolutions.nl/5a-usb-c-voedingsadapter-voor-raspberry-pi">https://www.sossolutions.nl/5a-usb-c-voedingsadapter-voor-raspberry-pi</a>	<a href="https://elektronicavoorjou.nl/product/originele-raspberry-pi-foundation-4-b-voeding-wit/">https://elektronicavoorjou.nl/product/originele-raspberry-pi-foundation-4-b-voeding-wit/</a>	1	\$ 16,95	€ 33,90	
5	NeoPixel Ring	NeoPixel ring 12-bit RGB leds round	1	1	<a href="https://www.otronic.nl/a-64167231/leds/12-bit-rgb-leds-ws2812b-cirkel-rond-neopixel/">https://www.otronic.nl/a-64167231/leds/12-bit-rgb-leds-ws2812b-cirkel-rond-neopixel/</a>	<a href="https://www.amazon.nl/AZDelivery-WS2812B-Neopixel-compatibel-12-LED-licht-LED-lamp-gemengde-kleuren/dp/B07DFE18TE">https://www.amazon.nl/AZDelivery-WS2812B-Neopixel-compatibel-12-LED-licht-LED-lamp-gemengde-kleuren/dp/B07DFE18TE</a>	1	\$ 3,99	€ 3,99	
6	Leds	Assortiment leds	1	1	<a href="https://www.otronic.nl/a-69640466/leds/100-leds-assortiment-2v-diverse-kleuren/">https://www.otronic.nl/a-69640466/leds/100-leds-assortiment-2v-diverse-kleuren/</a>	<a href="https://www.amazon.nl/helder-LED-licht-LED-lamp-gemengde-kleuren/dp/B06XDM4GSL">https://www.amazon.nl/helder-LED-licht-LED-lamp-gemengde-kleuren/dp/B06XDM4GSL</a>	1	\$ 6,99	€ 6,99	
7	Display blue backlight	Display blue backlight 5v	1	1	<a href="https://www.otronic.nl/a-62700212/displays/1602-lcd-blauw-backlight-5v/">https://www.otronic.nl/a-62700212/displays/1602-lcd-blauw-backlight-5v/</a>	<a href="https://nl.aliexpress.com/item/32964494970.html?gatewayAdapt=glo2nl">https://nl.aliexpress.com/item/32964494970.html?gatewayAdapt=glo2nl</a>	1	\$ 3,89	€ 3,89	
8	Breadboard power	Breadboard Voeding 3,3V to 5v	1	2	<a href="https://www.otronic.nl/a-60560325/spanningsregelaars/breadboard-voeding-converter-naar-3-3v-en-5v/">https://www.otronic.nl/a-60560325/spanningsregelaars/breadboard-voeding-converter-naar-3-3v-en-5v/</a>	<a href="https://www.tinytronics.nl/shop/nl/power/spanningsconverters/spanningsregelaars/breadboard-voeding-3-3v-en-5v">https://www.tinytronics.nl/shop/nl/power/spanningsconverters/spanningsregelaars/breadboard-voeding-3-3v-en-5v</a>	1	\$ 1,69	€ 3,38	
9	Breadboard	Breadboard	1	6	<a href="https://www.otronic.nl/a-60559347/prototyping/breadboard-830-gaats-voor-prototyping/">https://www.otronic.nl/a-60559347/prototyping/breadboard-830-gaats-voor-prototyping/</a>	<a href="https://www.tinytronics.nl/shop/nl/gereedschap-en-montage/prototyping-techniek/breadboards/breadboard-830-gaats-voor-prototyping">https://www.tinytronics.nl/shop/nl/gereedschap-en-montage/prototyping-techniek/breadboards/breadboard-830-gaats-voor-prototyping</a>	1	\$ 2,49	€ 14,94	

10	Magnet	magnets for reed contacts	1	12	<a href="https://www.tinytronics.nl/shop/nl/mechanica-en-actuatoren/onderdelen/magneten/neodymium-magneet-2*10mm">https://www.tinytronics.nl/shop/nl/mechanica-en-actuatoren/onderdelen/magneten/neodymium-magneet-2*10mm</a>	<a href="https://www.bitsandparts.nl/Magneet-neodymium-rond-8mm-x-3mm-p1859070">https://www.bitsandparts.nl/Magneet-neodymium-rond-8mm-x-3mm-p1859070</a>	1	\$ 0,60	€ 7,20
11	reed contact	reed contacts	1	8	<a href="https://www.tinytronics.nl/shop/nl/schakelaars/magneetschakelaars/reed-relais-2*14mm">https://www.tinytronics.nl/shop/nl/schakelaars/magneetschakelaars/reed-relais-2*14mm</a>	<a href="https://www.elektro-rama.nl/contents/nl/d748_Glasbuis-contacten.html">https://www.elektro-rama.nl/contents/nl/d748_Glasbuis-contacten.html</a>	1	\$ 1,71	€ 13,68
12	RFID-RC522 NFC	rfid reader/writer	1	1	<a href="https://www.otronic.nl/a-60634400/rfid-nfc/rfid-rc522-nfc-kit-mfrc522-s50-mifare-incl-rfid-fudan-card-en-key-tag/">https://www.otronic.nl/a-60634400/rfid-nfc/rfid-rc522-nfc-kit-mfrc522-s50-mifare-incl-rfid-fudan-card-en-key-tag/</a>	<a href="https://www.bol.com/be/nl/p/rfid-kit-mifare-rc522-rfid-leesmodule-met-s50-witte-kaart-en-usb-adapter-voor-pc">https://www.bol.com/be/nl/p/rfid-kit-mifare-rc522-rfid-leesmodule-met-s50-witte-kaart-en-usb-adapter-voor-pc</a>	1	\$ 4,49	€ 4,49
13	sd-card	sd-card	1	1	<a href="https://www.bol.com/be/nl/p/sandisk-ultra-micro-sdhc-16gb-met-adapter/9200000047488161/">https://www.bol.com/be/nl/p/sandisk-ultra-micro-sdhc-16gb-met-adapter/9200000047488161/</a>	<a href="https://www.amazon.com/Sandisk-COMINU024966-16GB-microSD-Card-15/500416MMAM">https://www.amazon.com/Sandisk-COMINU024966-16GB-microSD-Card-15/500416MMAM</a>	1	\$ 9,89	€ 9,89
14	Servo motor	Servomotor MG90S 360 degrees	2	2	<a href="https://www.otronic.nl/a-62468987/servos/servo-mg90s-micro-metalen-tandwielen-360-graden/">https://www.otronic.nl/a-62468987/servos/servo-mg90s-micro-metalen-tandwielen-360-graden/</a>	<a href="https://www.electroniccomp.com/mg995-metal-gear-servo-motor-360-degree-rotation">https://www.electroniccomp.com/mg995-metal-gear-servo-motor-360-degree-rotation</a>	1	\$ 6,99	€ 13,98
15	Pushbuttons	Pushbuttons green	1	6	<a href="https://www.tinytronics.nl/shop/nl/schakelaars/manuele-schakelaars/drukknoppen-en-schakelaars/groene-drukknop-12mm-reset-pbs-33b">https://www.tinytronics.nl/shop/nl/schakelaars/manuele-schakelaars/drukknoppen-en-schakelaars/groene-drukknop-12mm-reset-pbs-33b</a>	<a href="https://nl.aliexpress.com/item/32866797664.html">https://nl.aliexpress.com/item/32866797664.html</a>	1	\$ 0,65	€ 3,90
16	voeding Breadboard	voeding voor externe voeding 9V/2A 5,5mm x 2,5mm jack	1	1	<a href="https://www.otronic.nl/a-64345460/voedingen/voeding-9v-2a-adapter-5-5mm-x-2-5mm-jack/">https://www.otronic.nl/a-64345460/voedingen/voeding-9v-2a-adapter-5-5mm-x-2-5mm-jack/</a>	<a href="https://www.bol.com/be/nl/p/ac-adapter-lader-voeding-100v-240v-dc-12v-1a-power-eu-10000000061201010/2017">https://www.bol.com/be/nl/p/ac-adapter-lader-voeding-100v-240v-dc-12v-1a-power-eu-10000000061201010/2017</a>	1	\$ 8,99	€ 8,99
17	Plywood 12mm 600x450	Casing of the puzzlbox	2	4	<a href="http://reservations.howest.be/Web/dashboard.php?">http://reservations.howest.be/Web/dashboard.php?</a>	<a href="http://www.Budalab.be">www.Budalab.be</a>	1	5,5	€ 22,00
18	RGB led	RGB LEDs for panel indication	2	4	<a href="https://www.tinytronics.nl/shop/nl/componenten/led's/led's/rgb-led-5mm-helder-common-cathode">https://www.tinytronics.nl/shop/nl/componenten/led's/led's/rgb-led-5mm-helder-common-cathode</a>	<a href="https://www.banggood.com/50pcs-LED-RGB-Common-Cathode-4-Pin-F5-5MM-Diode-p/_search?cid=3281021021">https://www.banggood.com/50pcs-LED-RGB-Common-Cathode-4-Pin-F5-5MM-Diode-p/_search?cid=3281021021</a>	1	\$ 0,25	€ 1,00
19	laser cutting	laser cutting 10 per 30 Min	1	1	<a href="http://reservations.howest.be/Web/dashboard.php?">http://reservations.howest.be/Web/dashboard.php?</a>	<a href="http://www.Budalab.be">www.Budalab.be</a>	1	\$ 15,00	€ 15,00
20	Case RPI	Case raspberry pi 3/4	1	1	<a href="https://www.amazon.co.uk/dp/B06XT1JKLQ/ref=twister_B07YDHMBQ9?_encoding=UTF8&amp;psc=1">https://www.amazon.co.uk/dp/B06XT1JKLQ/ref=twister_B07YDHMBQ9?_encoding=UTF8&amp;psc=1</a>	<a href="https://wiki.52pi.com/index.php?title=ZP-0102">https://wiki.52pi.com/index.php?title=ZP-0102</a>	1	\$ 4,00	€ 4,00
21	emergency button	emergency button used for ending button	1	1	<a href="https://www.otronic.nl/a-69640994/schakelaars/noodknop-paddestoel-rood-druk-draai/">https://www.otronic.nl/a-69640994/schakelaars/noodknop-paddestoel-rood-druk-draai/</a>	<a href="https://netstore.rexel.be/NS/servelet/be.rex.ns.is.RexItemDetailServlet;jsessionid=0608B5005A05E107400040005D750050">https://netstore.rexel.be/NS/servelet/be.rex.ns.is.RexItemDetailServlet;jsessionid=0608B5005A05E107400040005D750050</a>	1	\$ 4,99	€ 4,99
22	gyroscop	gyroscop/accelerometer	1	1	<a href="https://www.otronic.nl/a-62468557/sensors/acceleratie-versnellingsmeter-en-gyroscop-i2c-mpu-6050/">https://www.otronic.nl/a-62468557/sensors/acceleratie-versnellingsmeter-en-gyroscop-i2c-mpu-6050/</a>	<a href="https://www.bol.com/be/nl/p/acceleratie-versnellingsmeter-en-gyroscop-i2c-mpu-6050-10000000001005150/">https://www.bol.com/be/nl/p/acceleratie-versnellingsmeter-en-gyroscop-i2c-mpu-6050-10000000001005150/</a>	1	\$ 3,49	€ 3,49
23	PCF8574N	PCF8574N I2C IO Expander - 8 bit - 16-pin DIP	1	6	<a href="https://www.tinytronics.nl/shop/nl/componenten/ic's-en-microcontrollerchips/ic's/pcf8574n-i2c-io-expander-8-bit-16-pin-dip">https://www.tinytronics.nl/shop/nl/componenten/ic's-en-microcontrollerchips/ic's/pcf8574n-i2c-io-expander-8-bit-16-pin-dip</a>	<a href="https://csd-electronics.de/ICs/Miscell-/divers/IC-Expander-PCF8574N-800-16-pin-DIP">https://csd-electronics.de/ICs/Miscell-/divers/IC-Expander-PCF8574N-800-16-pin-DIP</a>	1	\$ 2,50	€ 15,00

24	Dupont male to female	Dupont male to female	1	1	<a href="https://www.otronic.nl/a-60558837/draden-en-kabels/dupont-jumper-kabels-40-stuks-male-female-20cm-draadbruggen-voor-breadboard/">https://www.otronic.nl/a-60558837/draden-en-kabels/dupont-jumper-kabels-40-stuks-male-female-20cm-draadbruggen-voor-breadboard/</a>	<a href="https://www.tinytronics.nl/shop/nl/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/">https://www.tinytronics.nl/shop/nl/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/</a>	1	\$ 2,00	€ 2,00
25	Dupont male to male 20cm	Dupont male to male 20cm	2	2	<a href="https://www.otronic.nl/a-60830250/draden-en-kabels/dupont-jumper-kabels-40-stuks-male-male-20cm-draadbruggen-voor-breadboard/">https://www.otronic.nl/a-60830250/draden-en-kabels/dupont-jumper-kabels-40-stuks-male-male-20cm-draadbruggen-voor-breadboard/</a>	<a href="https://www.tinytronics.nl/shop/nl/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/">https://www.tinytronics.nl/shop/nl/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/</a>	1	\$ 2,00	€ 4,00
26	Dupont male to male 40 cm	Dupont male to male 40 cm	2	2	<a href="https://www.otronic.nl/a-63595596/draden-en-kabels/dupont-jumper-kabels-40-stuks-male-male-40cm-draadbruggen-voor-breadboard/">https://www.otronic.nl/a-63595596/draden-en-kabels/dupont-jumper-kabels-40-stuks-male-male-40cm-draadbruggen-voor-breadboard/</a>	<a href="https://www.tinytronics.nl/shop/nl/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/">https://www.tinytronics.nl/shop/nl/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/kabels-en-connectoren/</a>	1	\$ 2,00	€ 4,00
27	Resistors	To protect components 330 Ohm	1	60	<a href="https://www.tinytronics.nl/shop/nl/componenten/weerstanden/weerstanden/330%CF%89-weerstand-(led-voorschakelweerstand)">https://www.tinytronics.nl/shop/nl/componenten/weerstanden/weerstanden/330%CF%89-weerstand-(led-voorschakelweerstand)</a>	<a href="https://www.kiwi-electronics.com/en/resistor-330-ohm-1-4-watt-5-10-pack-6501">https://www.kiwi-electronics.com/en/resistor-330-ohm-1-4-watt-5-10-pack-6501</a>	1	\$ 0,05	€ 3,00
28	Extra	cutting blades, glue, sand paper, zipties,	2	1	<a href="https://www.bcfv.be/">https://www.bcfv.be/</a>	<a href="https://www.gamma.be/nl">https://www.gamma.be/nl</a>		\$ 10,00	€ 10,00
29	BCD	BCD switch complementair printmodel 10x10mm	1	1	<a href="https://www.gotron.be/bcd-switch-complementair-printmodel-10x10mm.html">https://www.gotron.be/bcd-switch-complementair-printmodel-10x10mm.html</a>	<a href="https://www.distrelec.be/en/rotary-dip-switch-bcd-rnd-components-rnd-210-00000/30000515">https://www.distrelec.be/en/rotary-dip-switch-bcd-rnd-components-rnd-210-00000/30000515</a>	1	\$ 3,30	€ 3,30
30	RFID card	RFID Cards	1	4	<a href="https://www.otronic.nl/a-61883406/rfid-nfc/rfid-kaart-13-56mhz-1k-s50-mifare-classic-wit/">https://www.otronic.nl/a-61883406/rfid-nfc/rfid-kaart-13-56mhz-1k-s50-mifare-classic-wit/</a>	<a href="https://www.tinytronics.nl/shop/nl/communicatie-en-signalen/draadloos/rfid/s50-mifare-kaart">https://www.tinytronics.nl/shop/nl/communicatie-en-signalen/draadloos/rfid/s50-mifare-kaart</a>	1	\$ 0,39	€ 1,56
29	rocker switches	rocker switches	1	1	<a href="https://www.tinytronics.nl/shop/nl/schakelaars/manuele-schakelaars/tuimelschakelaars/standaard-inbouw-tuimelschakelaar-mts-202">https://www.tinytronics.nl/shop/nl/schakelaars/manuele-schakelaars/tuimelschakelaars/standaard-inbouw-tuimelschakelaar-mts-202</a>	<a href="https://www.conrad.be/nl/p/te-connectivity-te-amp-toggle-pushbutton-and-rocker-switches-1-stuk-a-packag">https://www.conrad.be/nl/p/te-connectivity-te-amp-toggle-pushbutton-and-rocker-switches-1-stuk-a-packag</a>	1	\$ 0,80	€ 0,80
30									€ -
<b>Total</b>			<b>137</b>						<b>€ 305,06</b>