

Class: 1MCT4  
 First Name: Antje  
 Name: Eechaute  
 Project Name: Smart letterbox  
 Assembly Revision: \_\_\_\_\_  
 Approval Date: 19-Mar-21  
 Part Count: 36  
 Total Cost: 1213



Part #	Part Name	Description	Revision	Qty	Supplier	also available from	Units	Unit Cost	Max Cost	Real Cost
1	Raspberry Pi 4 model B	Raspberry Pi to control the entire system	1	1	<a href="https://unikits.be/product/mct-prototyping-kit-raspberry-pi-gedeelte/">https://unikits.be/product/mct-prototyping-kit-raspberry-pi-gedeelte/</a>	<a href="https://www.raspberrystore.nl/PrestaShop/raspberry-pi-v4/228-raspberry-pi-4b4gb-765756931182.html">https://www.raspberrystore.nl/PrestaShop/raspberry-pi-v4/228-raspberry-pi-4b4gb-765756931182.html</a>	1	75,00	75,00	72,00
2	Raspberry Pi T-cobbler	Breakout board for Raspberry Pi	1	1	<a href="https://unikits.be/product/howest-mct-arduino/">https://unikits.be/product/howest-mct-arduino/</a>	<a href="https://www.adafruit.com/product/2028">https://www.adafruit.com/product/2028</a>	1	7,95	7,95	7,95
3	Weight sensor	weight sensor	1	1	<a href="https://www.amazon.nl/gp/product/B0895KP2FH/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&amp;psc=1">https://www.amazon.nl/gp/product/B0895KP2FH/ref=ppx_yo_dt_b_asin_title_o00_s00?ie=UTF8&amp;psc=1</a>	<a href="https://www.google.com/search?q=0302.0.0.56be1faasjzjll&amp;algo=pside&amp;algo_expide=&amp;bitsid=0bb0623f16235986641904914e89f6&amp;w">https://www.google.com/search?q=0302.0.0.56be1faasjzjll&amp;algo=pside&amp;algo_expide=&amp;bitsid=0bb0623f16235986641904914e89f6&amp;w</a>	4	11,29	11,29	11,29
4	Load Cell amplifier - HX711	load cell amplifier	1	1	<a href="https://www.tinytronics.nl/shop/nl/sensoren/gewicht-druk-kracht/load-cell-versterker-hx711">https://www.tinytronics.nl/shop/nl/sensoren/gewicht-druk-kracht/load-cell-versterker-hx711</a>	<a href="https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module">https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module</a>	1	2,00	2,00	2,00
5	IR Pyroelectrische Infrarood PIR Motion Sensor Detector Module	motion sensor	1	1	<a href="https://unikits.be/product/howest-mct-arduino/">https://unikits.be/product/howest-mct-arduino/</a>	<a href="https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module">https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module</a>	1	3,50	3,50	3,50
6	accelerometer	MPU-6050 Accelerometer en Gyroscope 3-Axis Module 3.3V-5V	1	1	<a href="https://unikits.be/product/howest-mct-arduino/">https://unikits.be/product/howest-mct-arduino/</a>	<a href="https://www.tinytronics.nl/shop/nl/sensoren/accelerometer-gyro/mpu-6050-accelerometer-en-gyroscope-3-axis-module-3">https://www.tinytronics.nl/shop/nl/sensoren/accelerometer-gyro/mpu-6050-accelerometer-en-gyroscope-3-axis-module-3</a>	1	4,00	4,00	4,00
7	LCD	LCD1602 module 16x2 karakters met parallel interface	1	1	<a href="https://unikits.be/product/howest-mct-arduino/">https://unikits.be/product/howest-mct-arduino/</a>	<a href="https://www.tinytronics.nl/shop/nl/display/lcd/lcd-display-16-2-karakters-met-witte-tekst-en-blauwe-backlight">https://www.tinytronics.nl/shop/nl/display/lcd/lcd-display-16-2-karakters-met-witte-tekst-en-blauwe-backlight</a>	1	4,00	4,00	4,00
8	magnetic lock	magnetic lock	1	1	<a href="https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module">https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module</a>	<a href="https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module">https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module</a>	1	12,99	12,99	12,99
9	power supply	power supply (3.3V, 5V, 12V)	1	1	<a href="https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module">https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module</a>	<a href="https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module">https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module</a>	1	5,69	5,69	4,16
10	Pip 120	transistor	1	1	<a href="https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module">https://www.tinytronics.nl/shop/nl/sensoren/optisch/ir-pyroelectrische-infrarood-pir-motion-sensor-detector-module</a>	<a href="https://www.kiwi-electronics.nl/tip120-darlington-transistor-3-pack">https://www.kiwi-electronics.nl/tip120-darlington-transistor-3-pack</a>	1	2,95	2,95	2,95

11	MDF plate	wood to build the housing	1	1	<a href="https://www.brico.be/nl/bouwmaterialen/hout/mdf-platen/sencys-mdf-paneel-244x122x1-2cm/5281654">https://www.brico.be/nl/bouwmaterialen/hout/mdf-platen/sencys-mdf-paneel-244x122x1-2cm/5281654</a>	<a href="https://www.gamma.be/nl/assortiment/mdf-plaat-244x122-cm-18-mm/p/B280448">https://www.gamma.be/nl/assortiment/mdf-plaat-244x122-cm-18-mm/p/B280448</a>	1	\$	22,99		22,99		22,99
12	corner connector	to build the housing	14	14	<a href="https://www.brico.be/nl/gereedschap-installatie/ijzerwaren/ankerwerk/gah-alberts-hoekverbinder-40x40x20mm/10022506">https://www.brico.be/nl/gereedschap-installatie/ijzerwaren/ankerwerk/gah-alberts-hoekverbinder-40x40x20mm/10022506</a>	<a href="https://www.gamma.be/nl/assortiment/stoelhoeken-25x14-mm-verzinkt-12-stuks/p/B359432">https://www.gamma.be/nl/assortiment/stoelhoeken-25x14-mm-verzinkt-12-stuks/p/B359432</a>	14	\$	1,19		16,66		16,66
13	hinges	to build the housing	4	2	<a href="https://www.brico.be/nl/gereedschap-installatie/ijzerwaren/meubelbeslag/vynex-scharnier-inox-40-x-40-mm-2-stuks/547343">https://www.brico.be/nl/gereedschap-installatie/ijzerwaren/meubelbeslag/vynex-scharnier-inox-40-x-40-mm-2-stuks/547343</a>	<a href="https://www.gamma.be/nl/assortiment/suki-scharnieren-bolknop-75-x-75-mm-vernikkeld/p/B611025">https://www.gamma.be/nl/assortiment/suki-scharnieren-bolknop-75-x-75-mm-vernikkeld/p/B611025</a>	2	\$	3,89		7,78		7,76
14	paint	to build the housing	3	3	<a href="https://www.action.com/nl-be/p/spectrum-hoogglans-spuitverf-4l">https://www.action.com/nl-be/p/spectrum-hoogglans-spuitverf-4l</a>	<a href="https://www.ava.be/nl/marabu-do-it-satin-matt-zwart-150ml-00669308?colour=81384">https://www.ava.be/nl/marabu-do-it-satin-matt-zwart-150ml-00669308?colour=81384</a>	3	\$	2,09		6,27		6,27
15	male to male jumper wires	male to male jumper wires	1	1	<a href="https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-male-male?_encoding=UTF8&amp;pd_rd_i=B01L5UJ36U&amp;pd_rd_r=d09c408b-aa7e-46b3-8185-77b1685acc9a&amp;pd_rd_w=QcwwQ&amp;pd_r">6?_encoding=UTF8&amp;pd_rd_i=B01L5UJ36U&amp;pd_rd_r=d09c408b-aa7e-46b3-8185-77b1685acc9a&amp;pd_rd_w=QcwwQ&amp;pd_r</a>	<a href="https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-male-male">https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-male-male</a>	1	\$	5,99		5,99		5,99
16	male to female jumper wires	male to female jumper wires	1	1	<a href="https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-male-female?ref=sr_1_11?__mk_nl_NL=%3C3%85M%3C3%85%3C5%BD%3C3%95%3C3%91&amp;cid=12FQCAyTV45MA&amp;dchild=1&amp;keywords=ma">ref=sr_1_11?__mk_nl_NL=%3C3%85M%3C3%85%3C5%BD%3C3%95%3C3%91&amp;cid=12FQCAyTV45MA&amp;dchild=1&amp;keywords=ma</a>	<a href="https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-male-female">https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-male-female</a>	1	\$	4,99		4,99		4,99
17	female to female jumper wires	female to female jumper wires	1	1	<a href="https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-female-female?ref=sr_1_1?__mk_nl_NL=%3C3%85M%3C3%85%3C5%BD%3C3%95%3C3%91&amp;cid=3CSDYX3J5PWQ&amp;dchild=1&amp;keywords=fer">7?ref=sr_1_1?__mk_nl_NL=%3C3%85M%3C3%85%3C5%BD%3C3%95%3C3%91&amp;cid=3CSDYX3J5PWQ&amp;dchild=1&amp;keywords=fer</a>	<a href="https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-female-female">https://www.kiwi-electronics.nl/jumperwires-kabeltjes/Premium-Jumperwires-40-stuks-op-strip-20cm-female-female</a>	1	\$	4,99		4,99		4,99
18	mounting wire	to connect the components	1	1	<a href="https://www.gotron.be/installatie/kabels/draad-op-roll/montage/soepele-montagedraad-10m-rood.html">https://www.gotron.be/installatie/kabels/draad-op-roll/montage/soepele-montagedraad-10m-rood.html</a>	<a href="https://www.allekabels.nl/montagedraad/7304/1290823/montagedraad.html">https://www.allekabels.nl/montagedraad/7304/1290823/montagedraad.html</a>	1	\$	1,50		1,50		1,50
19	tin	tin to solder	1	1	<a href="https://www.kiwi-electronics.nl/soldeermiddel/dp/B07XFCBSBR?ref=sr_1_3?__mk_nl_NL=%3C3%85M%3C3%85%3C5%BD%3C3%95%3C3%91&amp;dchild=1&amp;keyw">-soldeermiddel/dp/B07XFCBSBR?ref=sr_1_3?__mk_nl_NL=%3C3%85M%3C3%85%3C5%BD%3C3%95%3C3%91&amp;dchild=1&amp;keyw</a>	<a href="https://www.kiwi-electronics.nl/soldeer-loodvrij-1mm-100g?search=tin&amp;description=true">https://www.kiwi-electronics.nl/soldeer-loodvrij-1mm-100g?search=tin&amp;description=true</a>	1	\$	9,99		9,99		9,99
20	microswitch	microswitch to know when the door is opened or closed	1	1	<a href="https://www.gotron.be/microswitch-met-rolhendel-on-on-15a-125v-7a-250v.html">https://www.gotron.be/microswitch-met-rolhendel-on-on-15a-125v-7a-250v.html</a>	<a href="https://www.kiwi-electronics.nl/mini-microswitch-spdt-roller-lever?search=microswitch&amp;description=true">https://www.kiwi-electronics.nl/mini-microswitch-spdt-roller-lever?search=microswitch&amp;description=true</a>	1	\$	2,40		2,40		2,40
<b>Total</b>			36								<b>212,93</b>		208,38