

Class 1MCT2  
 First Name: Michiel  
 Name Deseck  
 Project Name : Smart Fridge  
 Assembly Revision : 1  
 Approval Date : 16-Mar-21  
 Part Count : 16  
 Total Cost : €188

Part #	Part Name	Description	Revision	Qty	Supplier	also available from	Units	Unit Cost	Max Cost	Real Cost
1	Raspberry Pi 4 model B with accessories	Raspberry Pi to control the entire system	1	1	<a href="https://nl.aliexpress.com/item/4000054878108.html?spm=a2g0s.9042311.0.0.48294c4dnr8P1z">https://nl.aliexpress.com/item/4000054878108.html?spm=a2g0s.9042311.0.0.48294c4dnr8P1z</a>	<a href="https://www.sossolutions.nl/raspberry-pi-4-model-b-4gb">https://www.sossolutions.nl/raspberry-pi-4-model-b-4gb</a>	1	\$ 65.00	€ 65.00	€ 65.00
2	DS18B20, 1-wire	Temperature Sensor	1	1	<a href="https://www.otronic.nl/a-60871831/sensors/ds18b20-to92-temperatuur-sensor-dallas-clone-thermometer/?oclid=Ci0KCOiAs5eCBhCB">https://www.otronic.nl/a-60871831/sensors/ds18b20-to92-temperatuur-sensor-dallas-clone-thermometer/?oclid=Ci0KCOiAs5eCBhCB</a>	<a href="https://www.hobbyelectronica.nl/product/ds18b20/?gclid=Cj0KCQiAs5eCBhCBARIsAEhk4r6lkhY-">https://www.hobbyelectronica.nl/product/ds18b20/?gclid=Cj0KCQiAs5eCBhCBARIsAEhk4r6lkhY-</a>	1	\$ 4.00	€ 4.00	€ 4.00
3	Mini Fridge	4L Mini Fridge	1	1	<a href="https://www.banggood.com/nl/6L-Portable-Mini-Bar-Car-Home-Fridge-Travel-Refrigerator-Cooler-Freezer-Camping-p-1682465.html?mmde=detail-left">https://www.banggood.com/nl/6L-Portable-Mini-Bar-Car-Home-Fridge-Travel-Refrigerator-Cooler-Freezer-Camping-p-1682465.html?mmde=detail-left</a>	<a href="https://www.bol.com/nl/p/mini-koelkast-4-liter-met-12v-of-100-240v-gaansluiting/92000000830766">https://www.bol.com/nl/p/mini-koelkast-4-liter-met-12v-of-100-240v-gaansluiting/92000000830766</a>	1	\$ 34.99	€ 34.99	€ 34.99
4	HX711 Weight Strain Sensor Resistance	Weight Sensor	1	1	<a href="https://www.banggood.com/4pcs-DIY-50KG-Body-Load-Cell-Weight-Strain-Sensor-Resistance-With-HX711-AD-Module-p-">https://www.banggood.com/4pcs-DIY-50KG-Body-Load-Cell-Weight-Strain-Sensor-Resistance-With-HX711-AD-Module-p-</a>	<a href="https://www.dennisdeal.com/products/4-stks-diy-50-kg-body-load-cell-gewicht-stam-sensor-waerstand-met-hx711-ad-">https://www.dennisdeal.com/products/4-stks-diy-50-kg-body-load-cell-gewicht-stam-sensor-waerstand-met-hx711-ad-</a>	1	\$ 6.80	€ 6.80	€ 6.80
5	RFID Read and Write module	RFID scanner	1	1	<a href="https://www.otronic.nl/a-60634400/sensors/rfid-rc522-nfc-kit-mfrc522-s50-mifare-incl-rfid-fudan-card-en-key-">https://www.otronic.nl/a-60634400/sensors/rfid-rc522-nfc-kit-mfrc522-s50-mifare-incl-rfid-fudan-card-en-key-</a>	<a href="https://tecvoordeel.nl/product/rc522-rfid-reader-kit/">https://tecvoordeel.nl/product/rc522-rfid-reader-kit/</a>	1	€ 4.98	€ 4.98	€ 4.98
6	5V/3.3V module		1	1	<a href="https://www.hobbyelectronica.nl/product/board-voedingsmodule-mb102-3-3-5v-">https://www.hobbyelectronica.nl/product/board-voedingsmodule-mb102-3-3-5v-</a>	<a href="https://www.google.com/shopping/product/1357925407963242731?q=5v+3.3v+module&amp;rlz=1C1GCEA-enBE930BE930&amp;biw=1536">https://www.google.com/shopping/product/1357925407963242731?q=5v+3.3v+module&amp;rlz=1C1GCEA-enBE930BE930&amp;biw=1536</a>	1	\$ 1.95	€ 1.95	€ 1.95
7	Wood for case	MDF 122x61 cm 12mm	1	1	<a href="https://www.hubo.be/nl/p/mdf-plaat-122x61-cm-12mm/133853.html">https://www.hubo.be/nl/p/mdf-plaat-122x61-cm-12mm/133853.html</a>	<a href="https://www.gamma.be/nl/assortiment/mdf-plaat-bruin-122x61-cm-12-mm/p/B055502">https://www.gamma.be/nl/assortiment/mdf-plaat-bruin-122x61-cm-12-mm/p/B055502</a>	1	\$ 9.29	€ 9.29	€ 9.29

8	3D-print + aluminium plate	3d print for load cell modules and aluminium name of project	1	1	<a href="https://www.budalab.be/index.php/nl/budalab/">https://www.budalab.be/index.php/nl/budalab/</a>	<a href="https://www.howest.be/nl/contact/kortrijk/campus-kortrijk-weide-industrial-design-center">https://www.howest.be/nl/contact/kortrijk/campus-kortrijk-weide-industrial-design-center</a>	1	\$	10.00	€	10.00	€	10.00
9	Relais	5V relaismodule WPM406	1	1	<a href="https://www.gotron.be/5v-relaismodule-wpm406-voor-arduino.html?gclid=CjwKCAjwJuGBhBkEiwA1xmbRR2N7LuFMzyp7fr0E8nincBE">https://www.gotron.be/5v-relaismodule-wpm406-voor-arduino.html?gclid=CjwKCAjwJuGBhBkEiwA1xmbRR2N7LuFMzyp7fr0E8nincBE</a>	<a href="https://www.conrad.be/p/makerfactory-mf-6402384-relaismodule-relais-module-geschikt-voor-arduino-1-stuks">https://www.conrad.be/p/makerfactory-mf-6402384-relaismodule-relais-module-geschikt-voor-arduino-1-stuks</a>	1	\$	5.90	€	5.90	€	5.90
10	LCD with I <sup>2</sup> C	LCD display	1	1	<a href="https://tecvoordeel.nl/product/1602-lcd-i2c-blauw/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRwKiBxQ6Ge4NudRnA-u3Sh-VH2hRani1G91AVSvMYH0zhK8BdlIib">https://tecvoordeel.nl/product/1602-lcd-i2c-blauw/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRwKiBxQ6Ge4NudRnA-u3Sh-VH2hRani1G91AVSvMYH0zhK8BdlIib</a>	<a href="https://www.hobbyelectronica.nl/product/1602-lcd-i2c-geel-backlight/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRcYmTW">https://www.hobbyelectronica.nl/product/1602-lcd-i2c-geel-backlight/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRcYmTW</a>	1	\$	5.79	€	5.79	€	5.79
11	Breadbord		1	1	<a href="https://www.bol.com/nl/p/breadboard-830-compatible/9200000112428477/?country=BE&amp;Referrer=ADV/NL_GOO002013_G">https://www.bol.com/nl/p/breadboard-830-compatible/9200000112428477/?country=BE&amp;Referrer=ADV/NL_GOO002013_G</a>	<a href="https://www.gotron.be/soldeerloos-breadboard-met-830-ronde-gaten-wit.html?gclid=CjwKCAjwJuGBhBkEiwA1xmbRcYmTW">https://www.gotron.be/soldeerloos-breadboard-met-830-ronde-gaten-wit.html?gclid=CjwKCAjwJuGBhBkEiwA1xmbRcYmTW</a>	1	\$	6.75	€	6.75	€	6.75
12	4x7 segment display	4 digits 7 segment display - Common Cathode Red	1	1	<a href="https://www.hobbyelectronica.nl/product/7-segment-4-digits-led-display-0-36inch-rood-common-cathode/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRd2nvERpDvERagTlvj6lr8PcSK1">https://www.hobbyelectronica.nl/product/7-segment-4-digits-led-display-0-36inch-rood-common-cathode/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRd2nvERpDvERagTlvj6lr8PcSK1</a>	<a href="https://www.otronic.nl/a-59964800/arduino/uno-r3-arduino-compatible-incl-usb-kabel-en-header-pins/">https://www.otronic.nl/a-59964800/arduino/uno-r3-arduino-compatible-incl-usb-kabel-en-header-pins/</a>	1	\$	1.95	€	1.95	€	1.95
13	Arduino Uno	Arduino to use less pins on Pi	1	1	<a href="https://tecvoordeel.nl/product/arduino-uno-compatible/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRdp5ldkjCwZ6eKyqWQQdfXnVg-eDuRd2nvERpDvERagTlvj6lr8PcSK1">https://tecvoordeel.nl/product/arduino-uno-compatible/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRdp5ldkjCwZ6eKyqWQQdfXnVg-eDuRd2nvERpDvERagTlvj6lr8PcSK1</a>	<a href="https://www.otronic.nl/a-59964800/arduino/uno-r3-arduino-compatible-incl-usb-kabel-en-header-pins/">https://www.otronic.nl/a-59964800/arduino/uno-r3-arduino-compatible-incl-usb-kabel-en-header-pins/</a>	1	\$	6.89	€	6.89	€	6.89
14	T-Cobbler	Easy wiring with Raspberry Pi	1	1	<a href="https://www.hobbyelectronica.nl/product/t-cobbler-plus-module/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRUP3xMz-Vx6ior0x6hOFla_h9VC2eMlVcluQM7Tycn235529.html?PROVID=2812">https://www.hobbyelectronica.nl/product/t-cobbler-plus-module/?gclid=CjwKCAjwJuGBhBkEiwA1xmbRUP3xMz-Vx6ior0x6hOFla_h9VC2eMlVcluQM7Tycn235529.html?PROVID=2812</a>	<a href="https://www.reichelt.com/be/nl/raspberry-pi-t-cobbler-plus-rpi-t-cobbler-p">https://www.reichelt.com/be/nl/raspberry-pi-t-cobbler-plus-rpi-t-cobbler-p</a>	1	\$	3.91	€	3.91	€	3.91
15	Electronics	Jumper-wires, resistors, solder, heat shrink tubing	1	1			1	\$	15.00	€	15.00	€	15.00
16	Screws and corner profiles		1	1			1	\$	5.00	€	5.00	€	5.00
<b>Total</b>			<b>16</b>								<b>€ 188.20</b>		