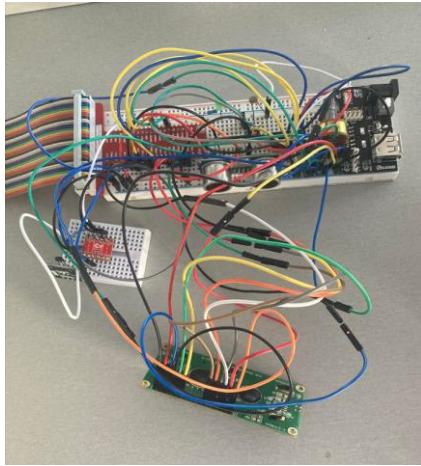


Class 1MCT1
 First Name: Jaron
 Name Vantomme
 Project Name : Smart skateboard
 Assembly Revision : _____
 Approval Date : _____
 Part Count : 14
 Total Cost : €246

Part #	Part Name	Description	Revision	Qty
1	Raspberry Pi 3 Model B + geheugenkaart	To control the entire system	1	1
2	hall sensor	To calculate the speed	1	1
3	Raspberry Pi 40 pins GPIO Extension kit	To control components with raspberry pi	1	1
4	powerbank	To power the raspberry pi	1	1
5	skateboard	To drive	1	1
6	LCD-scherm	To see your speed live on your skateboard	1	1
7	Ultrasonic Distance Sensor Module	to measure the distance between your feet and board	1	1
8	LDR sensor	To use as a button with your feet	1	1
9	magneet	For your hall sensor to know if the wheel passed	1	1
10	buzzer	When you press button with your feet, it make a sound	1	1

11	ledstrip	to give light at night	1	1
12	MCP3008	It is a 8-channel 10bit analog to digital converter. I use it to read the ldr sensor.	1	1
13	potmeter	That is to set the brightness from the lcd screen	1	1
14	levelshifter	It is used to read a sensor connected to the 5V with a Raspberry Pi that can only handle 3.3V		
15	9V batterij clip met 5.5mm jack	to power all electronics	1	1
Total				14



(picture can only be added with END delivery of pro

Supplier	also available from	Units	Unit Cost
https://www.sossolutions.nl/raspberry-pi-3b?gclid=Cj0KCQiA95aRBhCsARIsAC2xvfwDe2QA6_VhC1EouLfM9yMakQNKm		1	€ 46,94
https://benl.rs-online.com/web/p/hall-effect-sensors/2166231?cm_mmc=BE-PLA-DS3A-_-google-_-CSS-RE-NL-Automation-%26-Control		1	€ 4,84
https://www.tinytronics.nl/shop/index.php?route=product/search&search=Raspberry%20Pi%2040%20pins%20GPIO%20Extension%20kit		1	€ 4,50
https://www.coolblue.be/nl/product/854525/bluebuilt-powerbank-20-000-mah-zwart.html?cmt=c_a%2Ccid_1579573365		1	€ 39,99
https://www.skatedeluxe.com/nl/skatedeluxe-rose-8-complete-skateboard-black_p132585?cPath=83		1	€ 99,99
https://www.otronic.nl/a-62700212/displays/1602-lcd-blauw-backlight-		1	€ 3,89
https://benl.rs-online.com/web/p/sensor-development-tools/7813020?cm_mmc=BE-PLA-DS3A-_-google-_-		1	€ 31,20
https://www.tinytronics.nl/shop/nl/sensoren/optisch/licht-en-kleur/gl5528-ldr-lichtgevoelige-weerst		1	€ 0,30
https://www.bol.com/be/nl/p/sterke-magneten-rond-50n-sterk-magneetjes-20-stuks-8-x-2mm/0200000103291988/2bltgh-ccFAqS		1	€ 3,95
https://www.tinytronics.nl/shop/nl/audio/speakers/buzzers/actieve-buzzer-5v		1	€ 0,50

https://benl.rs-online.com/web/p/led-development-tools/1887105?cm_mmc=BE-PLA-DS3A-google-	1	€	5,87
https://benl.rs-online.com/web/p/analogue-to-digital-converters/8895143	1	€	2,80
https://www.digikey.be/nl/products/detail/bourns-inc./PDB181-K420K-102A2/2564741?utm_adgroup=Potentiometers%20%20Variable%20Resistors&utm	1	€	1,41
https://www.otronic.nl/a-65454239/spanningsregelaars/4-kanaals-logic-voltage-level-converter/?gclid=Cj0KCQjwhqaVBhCxARIsAHK1tiMuAS9DR2gKv_aG0I4BM8yCieR	1	€	1,99
https://www.otronic.nl/a-64336821/batterijhouders/9v-batterij-clip-met-5-5mm-jack/?gclid=Cj0KCQjwkruVBhCHARIsACVliOwDSaV9fD7dZswUYek93eX7NYTXra	1	€	0,59

ject!)

Max Cost	Real Cost
€ 46,94	
€ 4,84	
€ 4,50	
€ 39,99	
€ 99,99	
€ 3,89	
€ 31,20	
€ 0,30	
€ 3,95	
€ 0,50	

€ 5,87

€ 2,80

€ 1,41

€ 1,99

€ 0,59

€ 246,18

