

Class	1MCT2
First Name:	Claeys
Name	Kobe
Project Name :	Smart Mailbox
Assembly Revision :	2
Approval Date :	
Part Count :	26
Total Cost :	€179

Part #	Part Name	Description	Revision	Qty
1	Raspberry Pi 4 model B	Raspberry Pi as controlling unit.	1	1
2	OTRONIC Solenoid 12V Deurslo	Electric doorlock that locks / unlocks the back door	1	1
3	RS PRO output Relay	To control the electronic doorlock that runs on 12V	1	1
4	Luna PDV-P5003 LDR	Detecting lasers + outside light	1	6
5	Laser diode 5v	Used together with ldr to detect falling letters	1	5
6	RFID-RC522 NFC Kit	Used to control lock and identify yourself.	1	1
7	USB - Led strip	Led strip used to illuminate inside of the mail box	1	1
8	12 V power supply	Used to power the electronic door lock	1	1
9	Wood + screws	Used to create the mailbox	1	?
10	Magnetic sensor	Detects when lid in front has been opened	1	1

11	Green LED's	1 to display post, 1 to show correct rfid scan	2	2
12	Push Button	1 to display the IP, 1 to turn the Pi on, 1 to turn it off and 1 to clear the box	2	4
13	16x2 LCD		2	1
14	Raspberry Pi case	1 to display the IP, 1 to turn the Pi on, 1 to turn it off and 1 to clear the box	2	1
	<b>Total</b>			<b>26</b>



Supplier	also available from	Units	Unit Cost
<a href="#">Electronica voor jou</a>	<a href="#">SOS solutions</a>	each	53,95 €
<a href="#">bol.com</a>	<a href="#">Otronic.nl</a>	each	16,99 €
<a href="#">RS-Components</a>	<a href="#">digikey</a>	each	12,72 €
<a href="#">Otronic</a>	<a href="#">Hobbyelectronica</a>	each	0,15 €
<a href="#">Otronic</a>	<a href="#">Bitsandparts</a>	each	0,89 €
<a href="#">Otronic</a>	<a href="#">bol.com</a>	each	4,49 €
<a href="#">Action</a>		each	1,59 €
<a href="#">Allekabels</a>		each	11,99 €
Hubo	DHZ centrum	each	\$ 21,49
<a href="#">Allekabels</a>		each	3,99 €

[Allekabels](#)

each

0,49 €

[Allekabels](#)

each

8,59 €

[HobbyElectronica](#)

each

2,95 €

[Amazon-nl](#)

each

7,99 €

Max Cost	Real Cost
€ 53,95	€ 64,95
€ 16,99	€ 15,85
€ 12,72	€ 14,45
€ 0,90	€ 9,95
€ 4,45	€ 11,70
€ 4,49	€ 4,49
€ 1,59	€ 1,59
€ 11,99	€ 14,98
€ 21,49	
€ 3,99	€ 10,98

€ 0,98 € 0,98

€ 34,36 € 34,36

€ 2,95 € 11,40

€ 7,99 € 7,99

**€ 178,84 € 178,84**