How to Build a Smart Garage Door Opener for Under $100

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Agenda

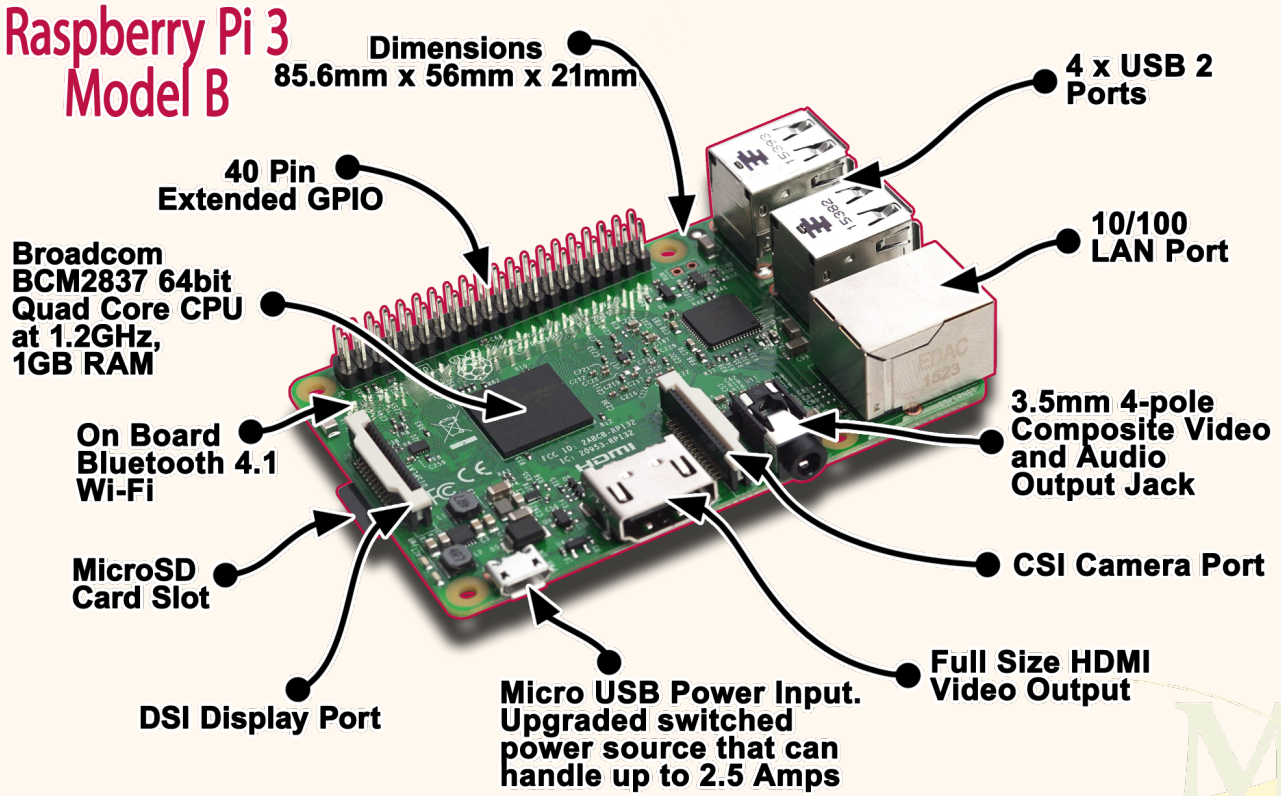
- My Garage Issues
- Raspberry Pi
- Windows 10 IoT Core
- Building the Pi App
- Azure IoT Hub
- Cloud Connected

TECHNOLOGY PARTNERS

The Problem

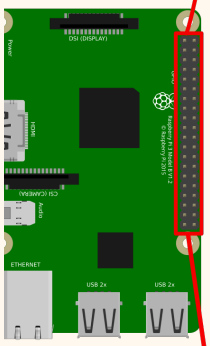
- Can’t see the door
- Apparently, people steal
- Also, I have kids

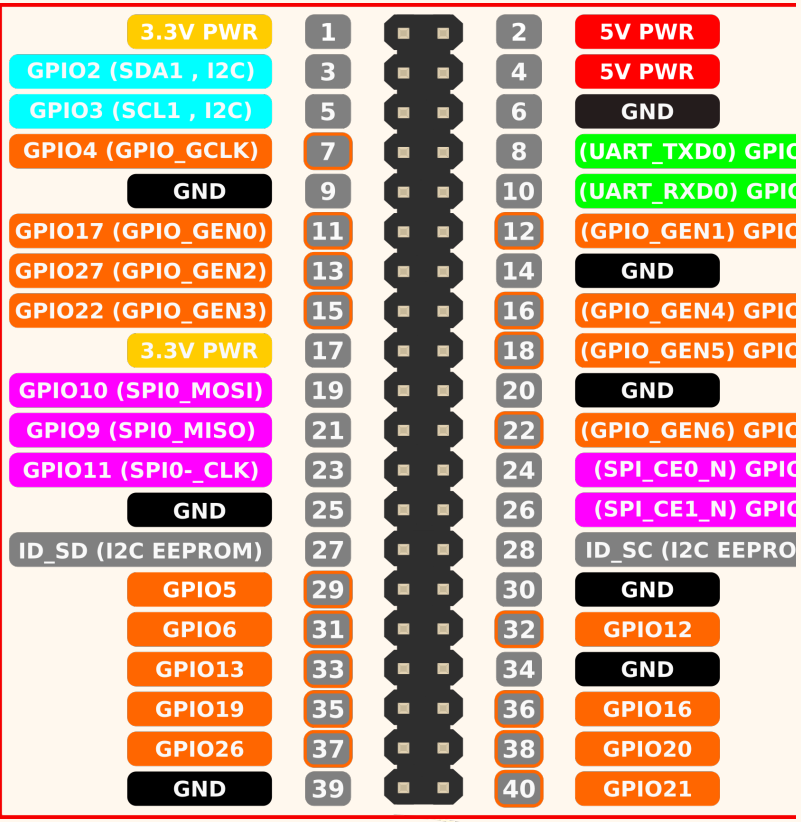
Raspberry Pi



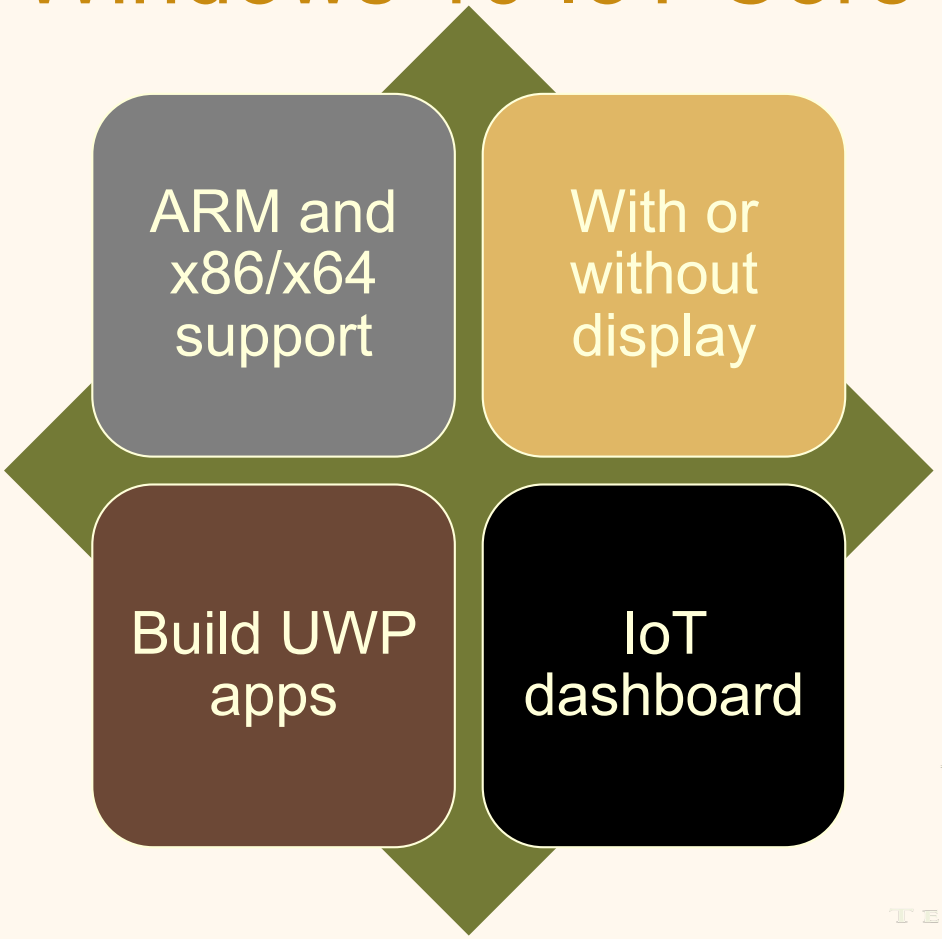
General Purpose Input / Output

- Power
- Ground
- Input
- Output
- Special PINs



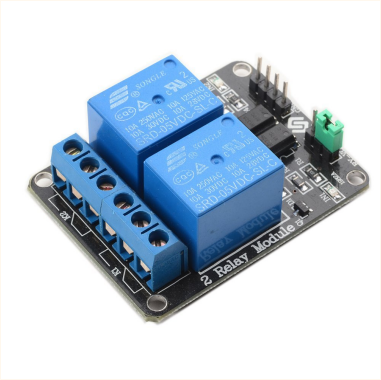


Windows 10 IoT Core



Shopping List

Hardware	Price
Raspberry Pi	$55
Door Sensor	$18
Relay	$7
Wires, Wires, Wires	$10
Total	**$90**



Azure IoT Hub

Provisioning of devices

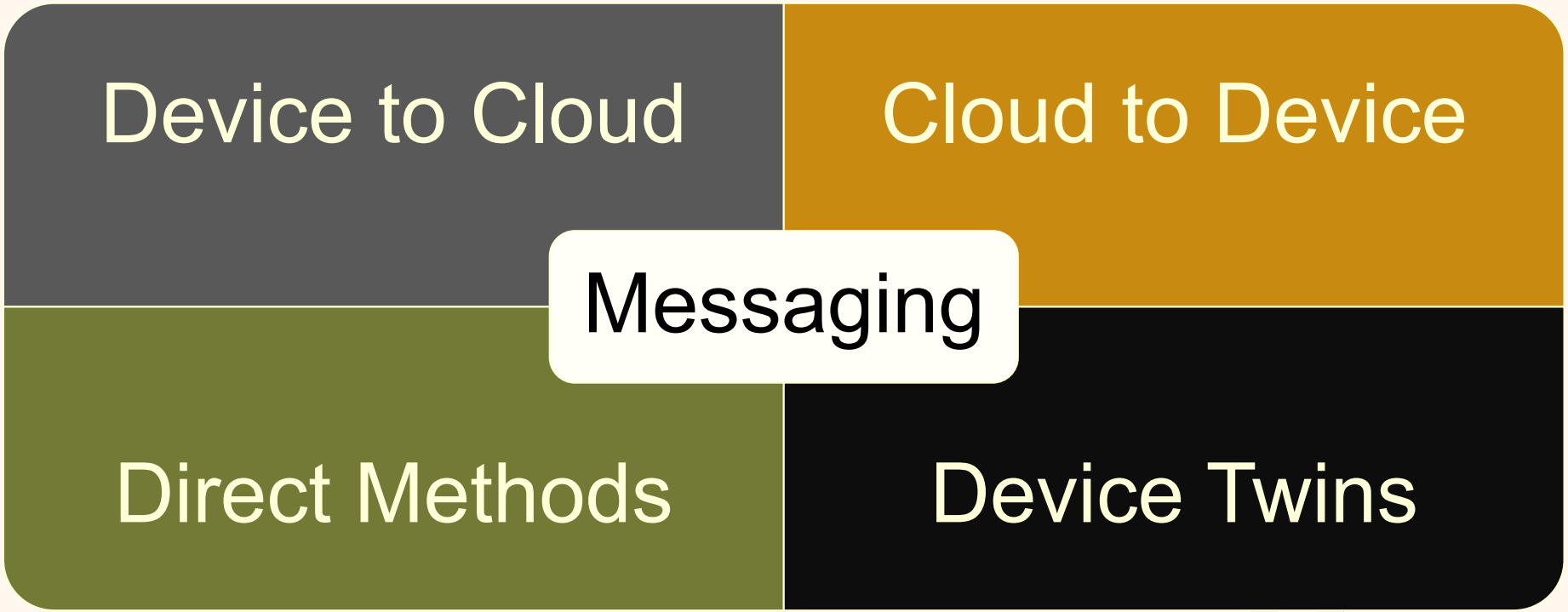
Messaging

Monitoring

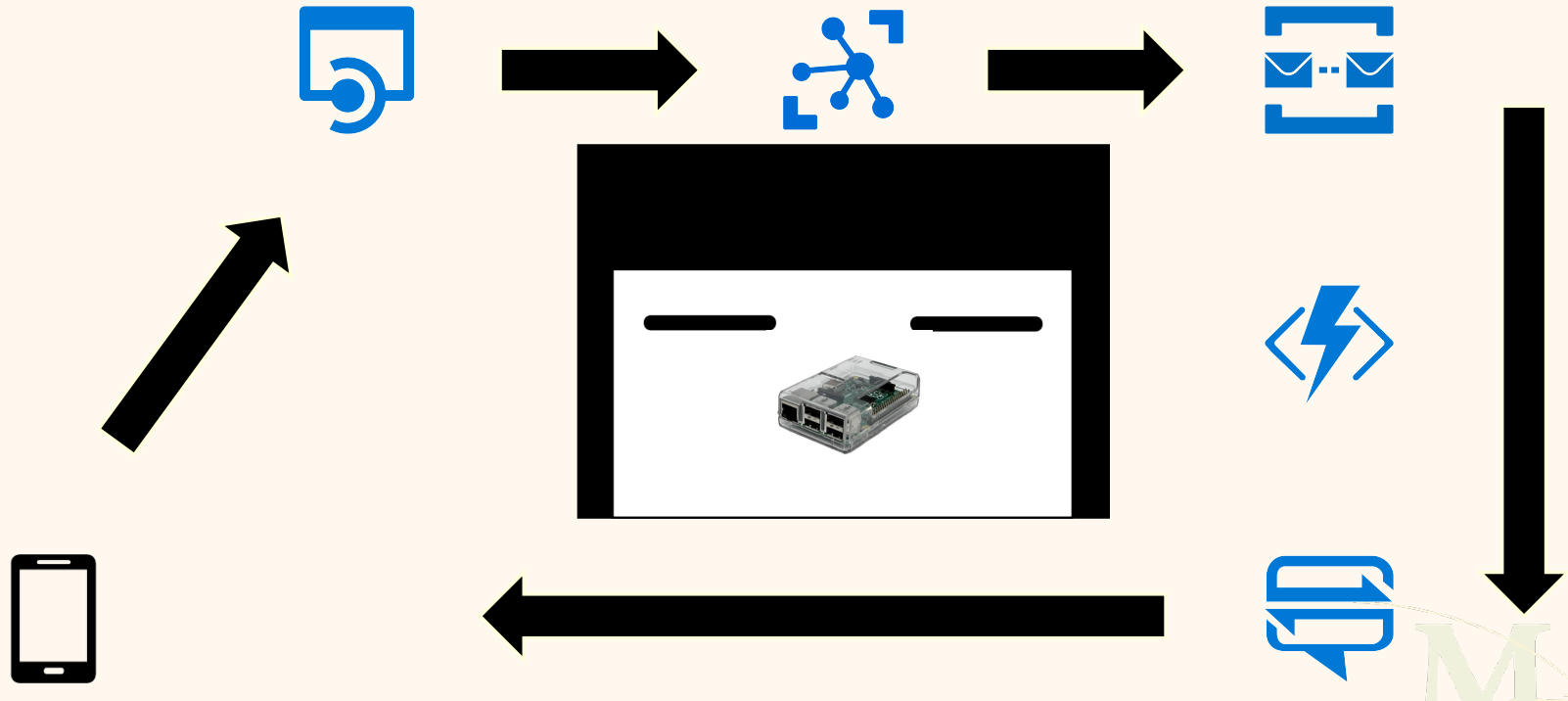
Multiple transports

Edge processing

Azure IoT Hub



The Solution



Future Plans

Device	• Webcam support
Mobile	• Widget / Voice
API	• Manage users / Share

Shopping Links

- Pi Kit (http://a.co/4MyLtDY)
- Sensor (http://a.co/awu8tHO)
- Relay (http://a.co/7nd6kto)
- Wires (http://a.co/c7I7xBW)
  - Bell wire for garage door opener
- Fun Kit (http://a.co/1w95ITZ)