

IoT-ECoTest

Energy consumption tests for the internet of things

Filip Kočovski, Jennifer Duchetta, Sandro Brändle, Yulian Maksimov

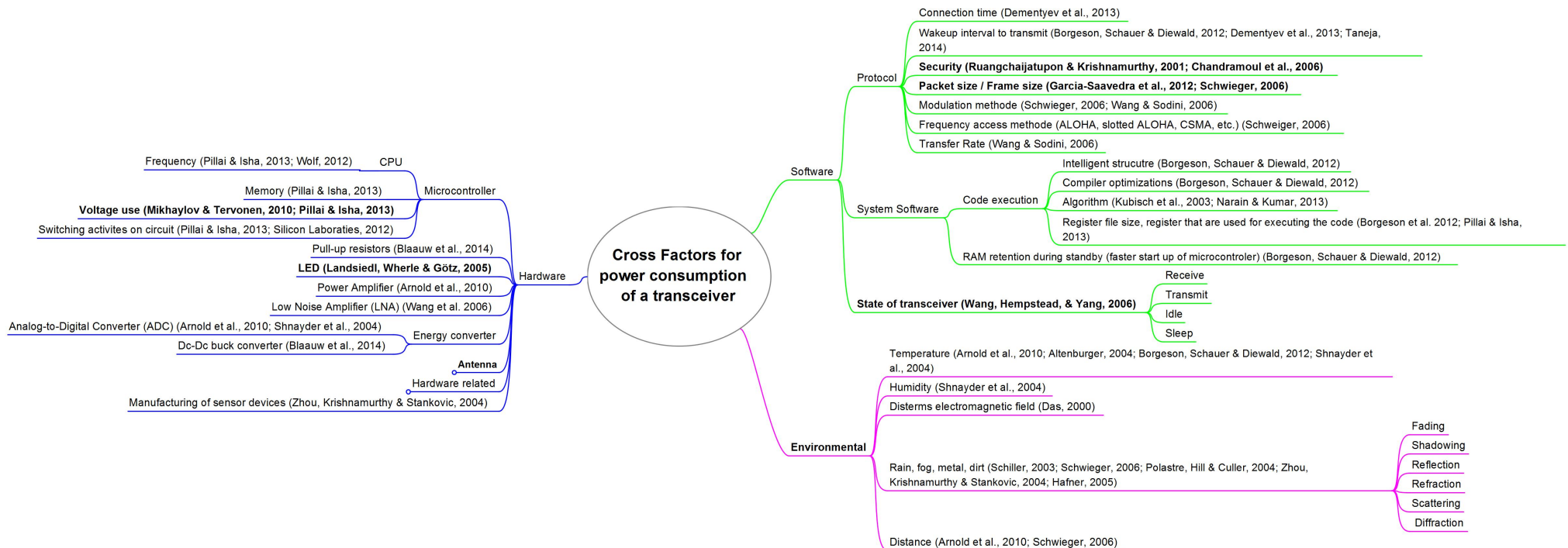
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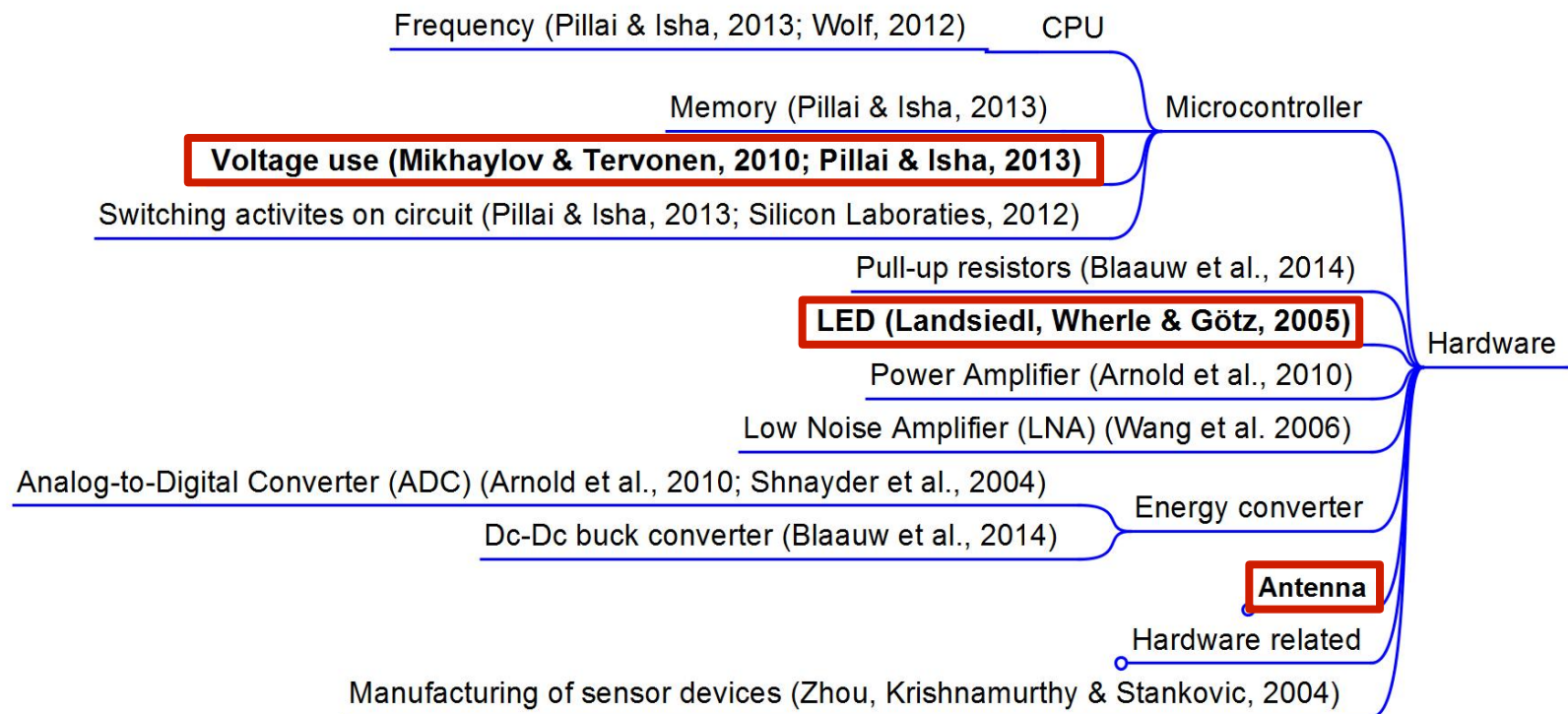
Project focus

- Which factors influence the power consumption of a transceiver?
- To what extent does each of these factors influence the power consumption of a transceiver?
- How can we compare different transceivers?

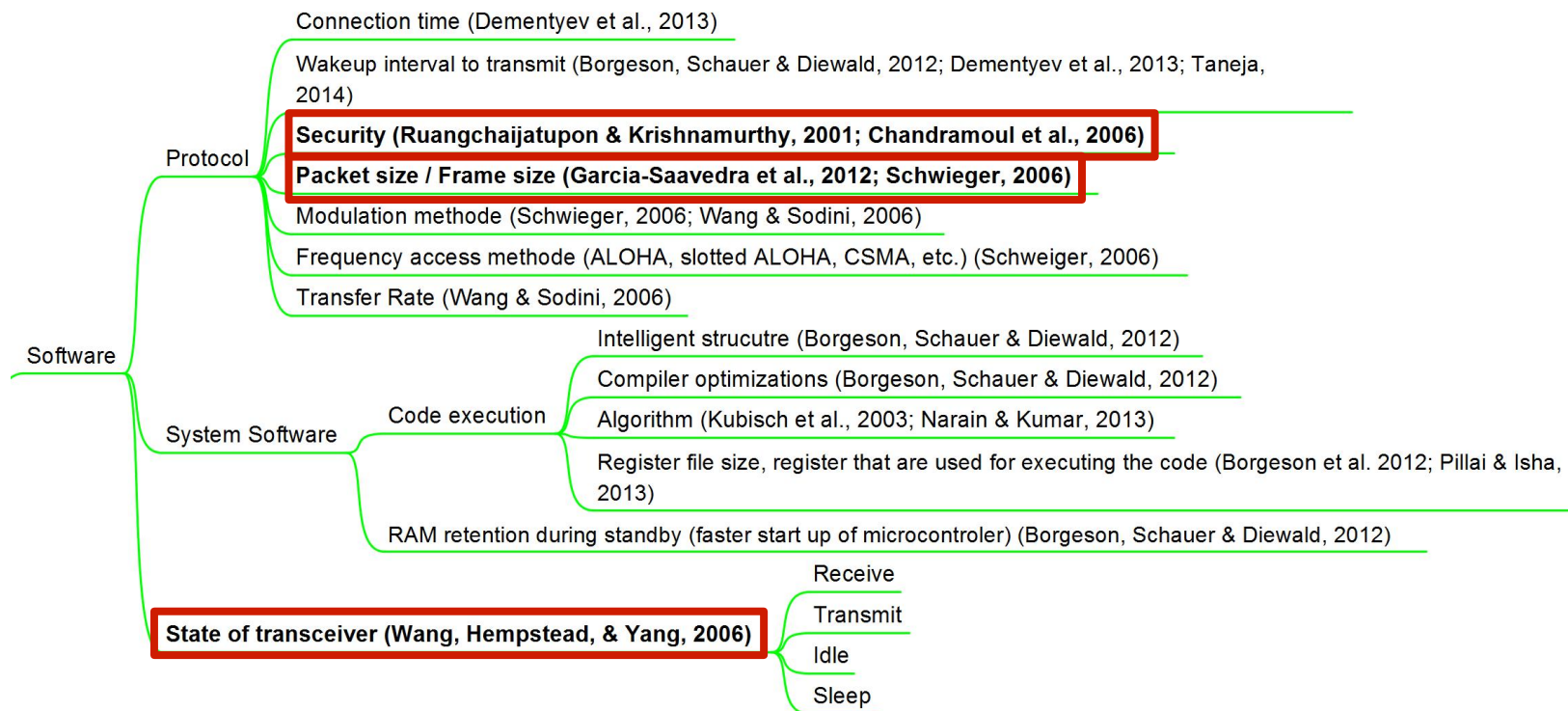
Which factors influence the power consumption of a transceiver?



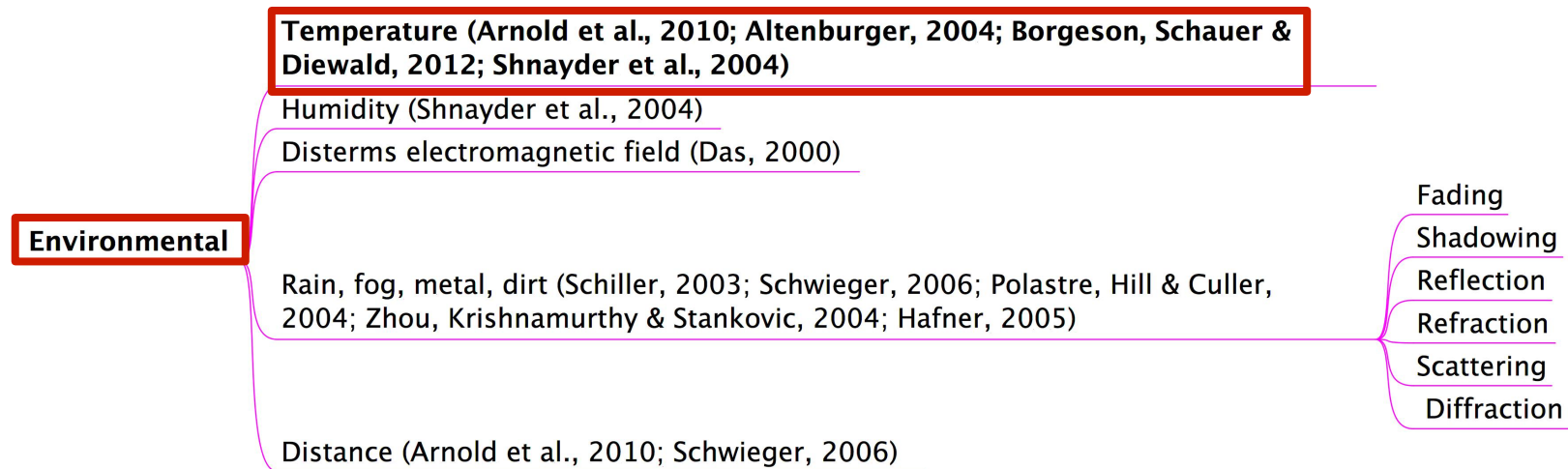
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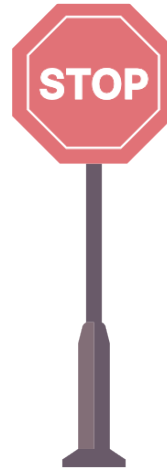
How can we compare different transceivers?



4 Modules not acquired



End-of-life (1)



Not customs-
approved (2)



Expensive (1)

6 Modules left



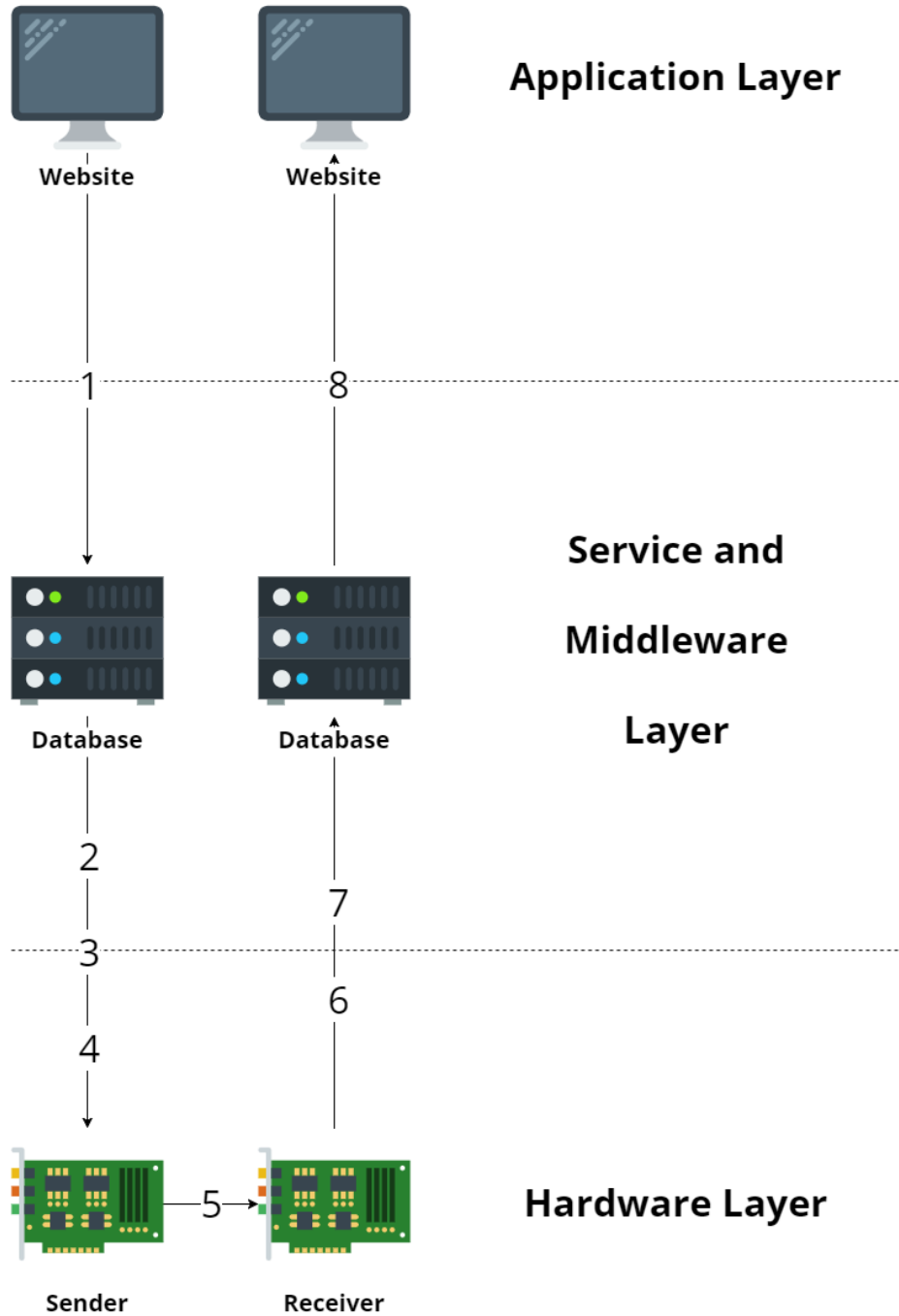
Wi-Fi (2)



Bluetooth (3)

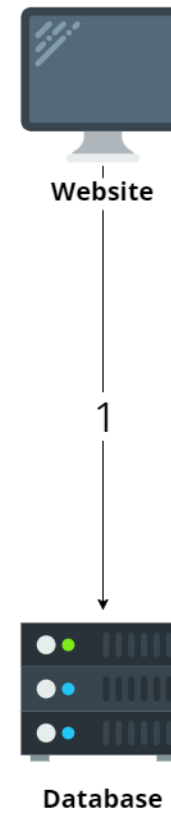


ZigBee (1)



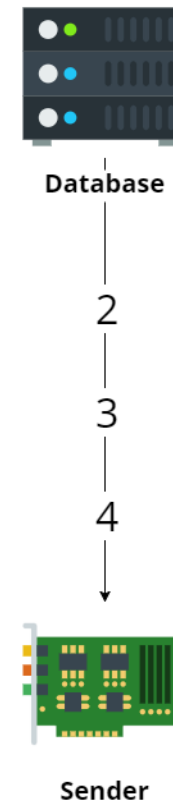
Architecture

1. User uploads data



Architecture

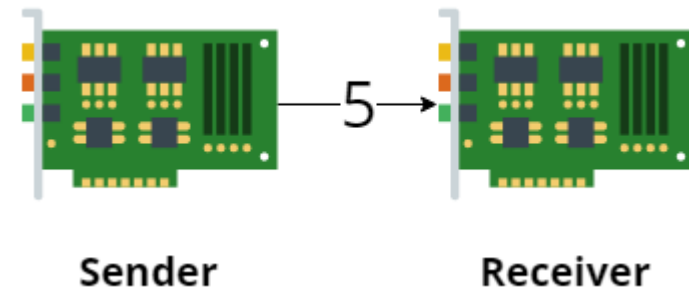
2. Frontend saves data into database
3. Database activates sender
4. Sender gets data



Architecture

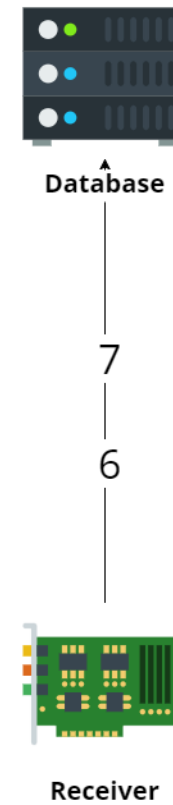
5. Sender transmits data

- Sender performs power measurement during data transmission and generates results



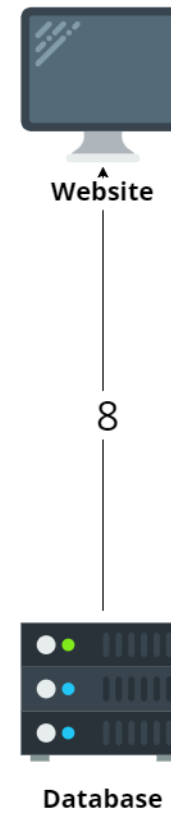
Architecture

6. Sender stores results into database
7. Frontend pulls results from database and evaluates key figures

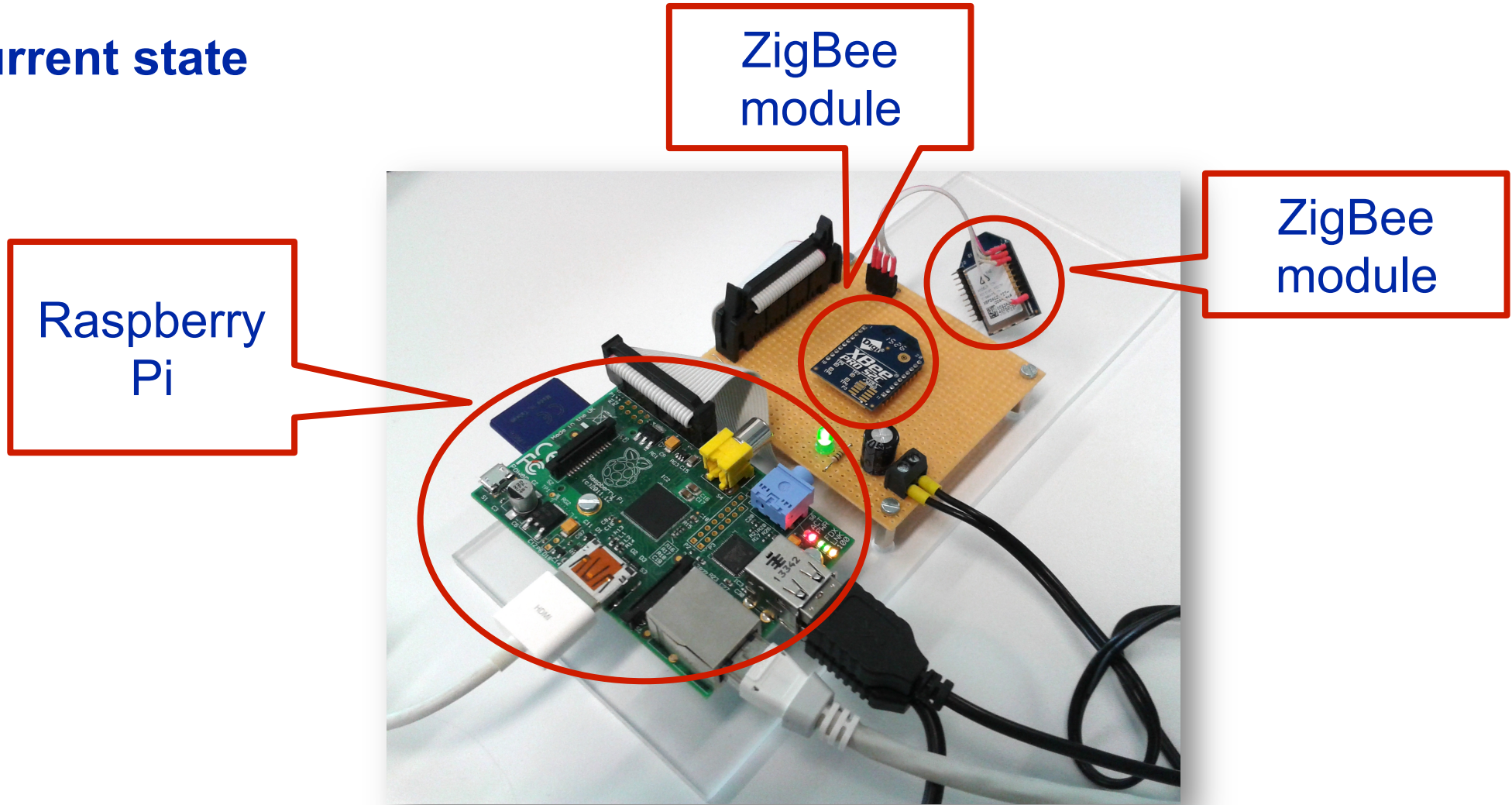


Architecture

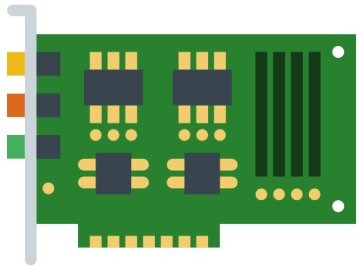
8. Webpage displays key figures



Current state



Next steps



Hardware



Software



Tests



Documentation