

Compressió de dades sobre FreeRTOS

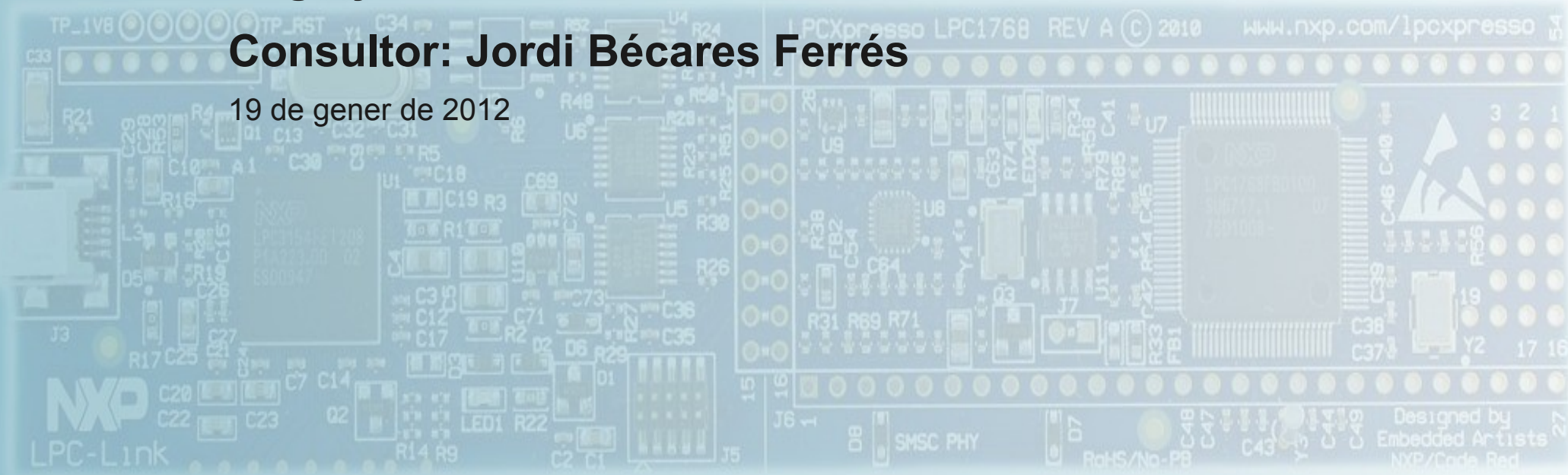


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Enginyeria en Informàtica

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Índex

2 Introducció

3 Objectius

4 Enunciat

5 Disseny

6 Diagrama de blocs

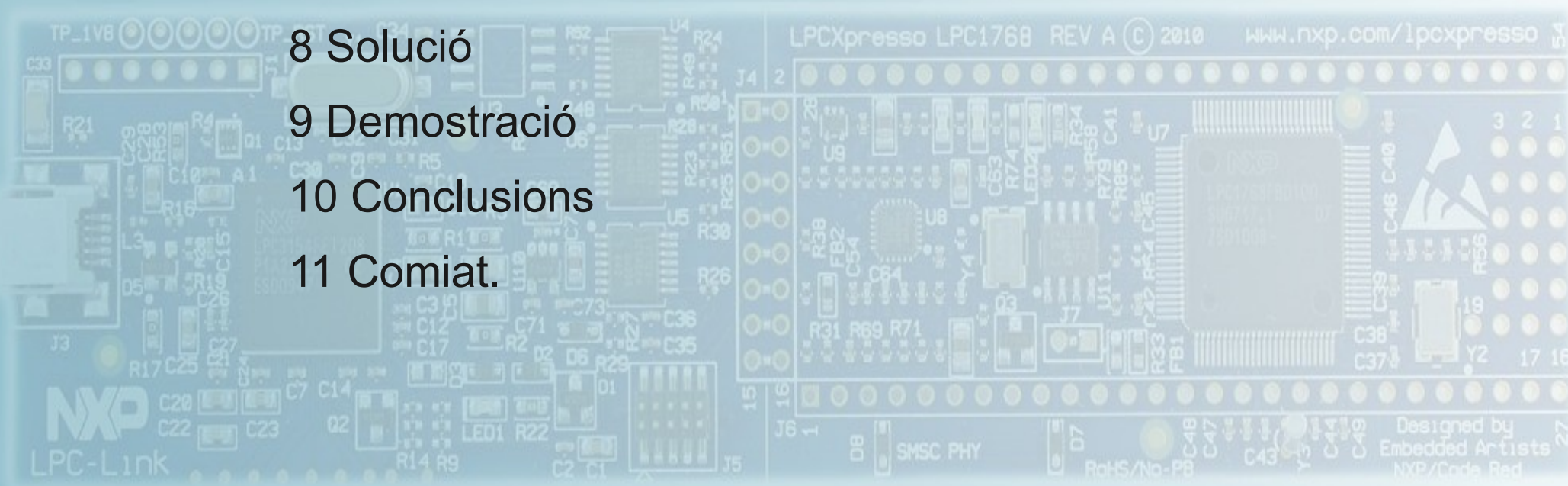
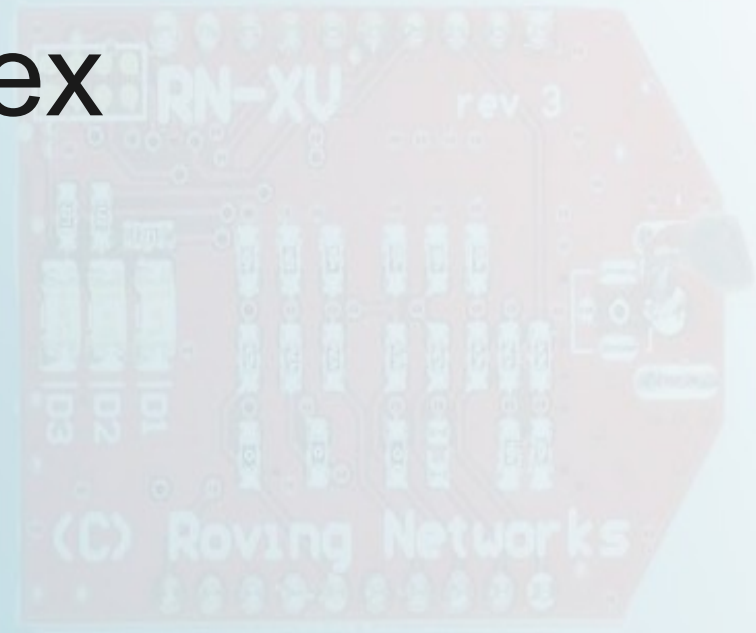
7 Problema

8 Solució

9 Demostració

10 Conclusions

11 Comiat.



Introducció

Sistemes encastats

- ◆ Maquinari

- SoC (Xarxa, Audio, Video, ...)
- Propòsit general
 - PIC
 - AVR

- ARM Cortex LPC 1769 + WiFly

- ◆ Programari

- CMSIS
- FreeRTOS

Control acurat del temps (RTOS)
Tasques
Cues
Semàfors

Objectius

- Adquisició d'experiència
- Bastiment
- Driver WiFly
- Comandament remot
- Compressió FreeRTOS

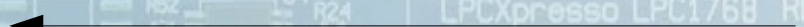


Enunciat

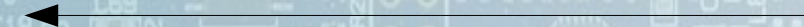
Dades



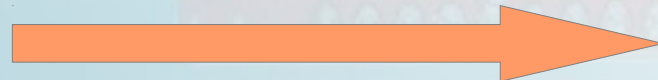
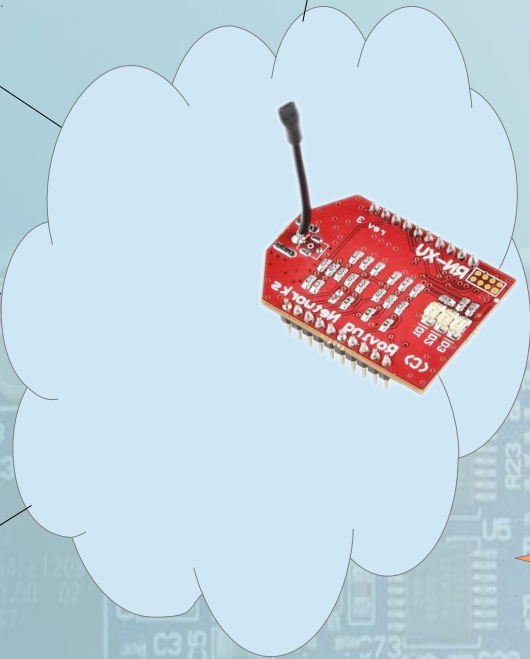
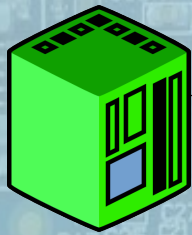
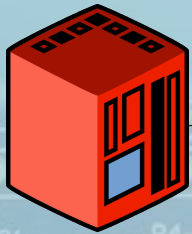
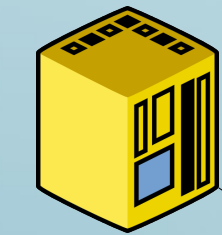
Dades
comprimides



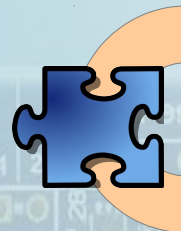
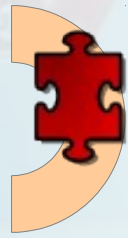
Resum



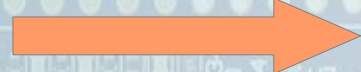
Disseny



Lectura



Compressió



Espectura

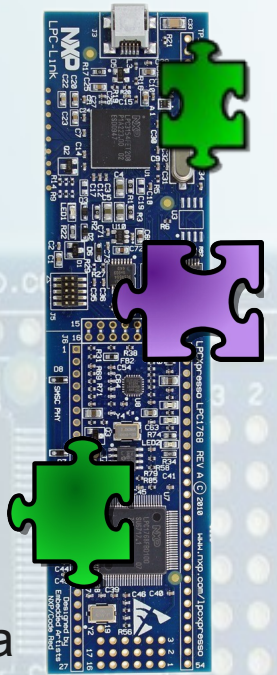
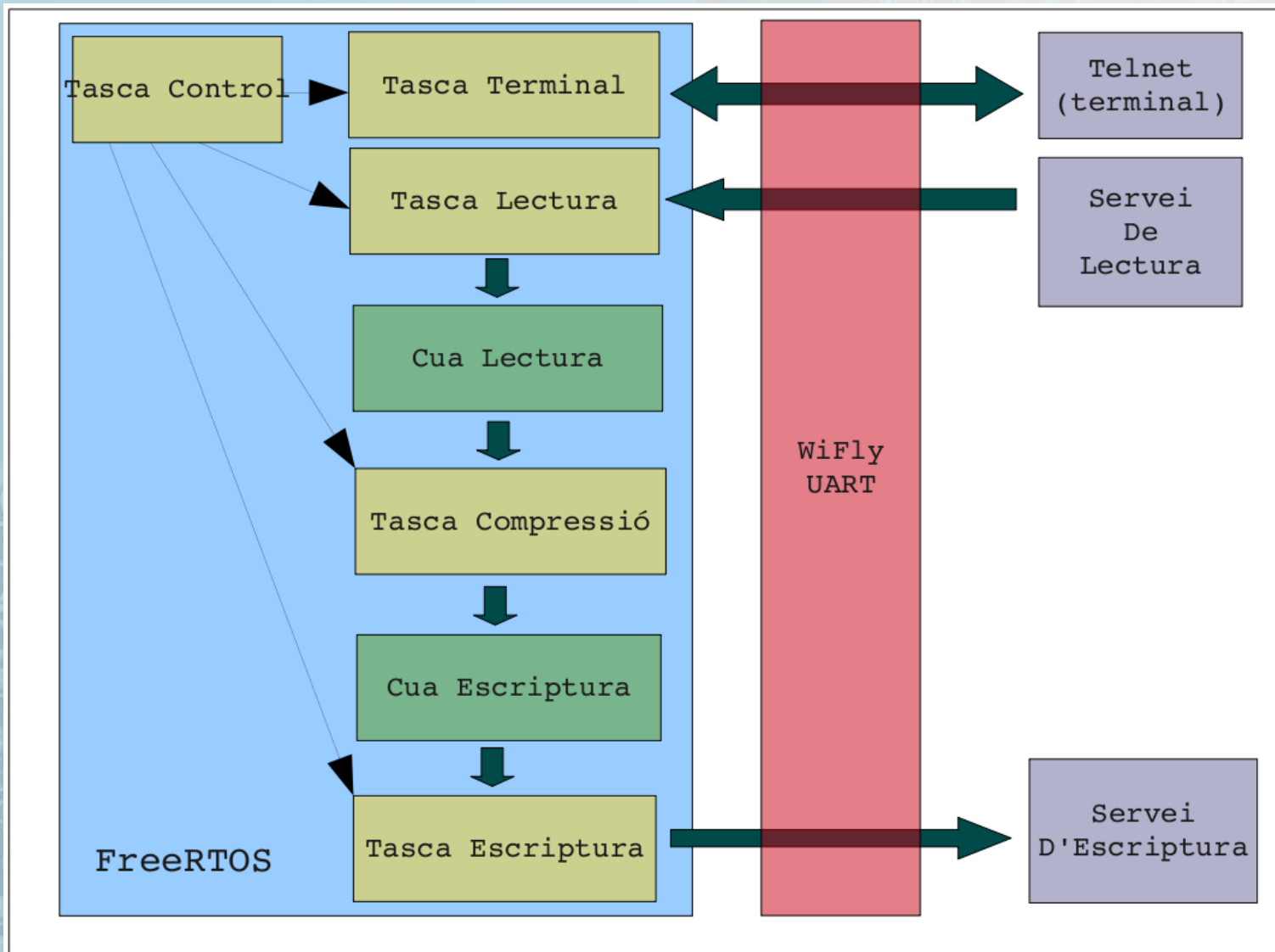
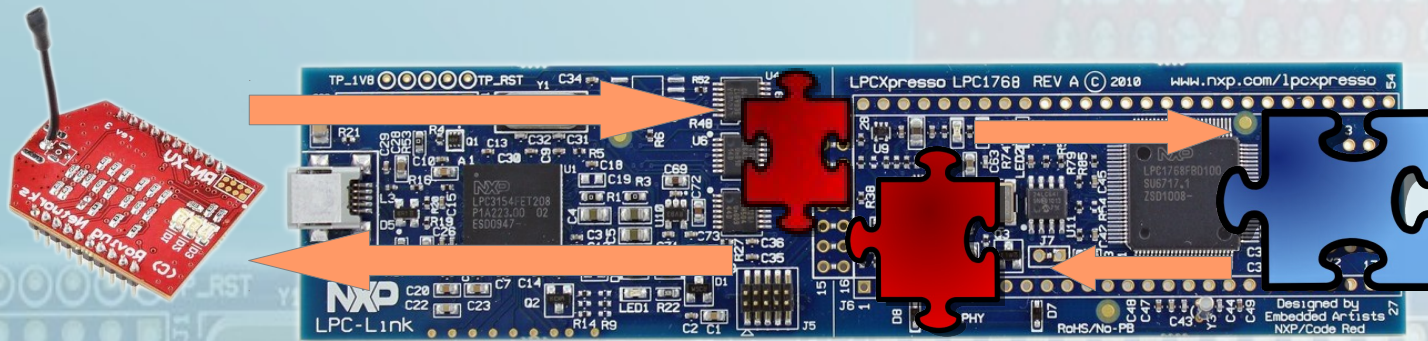


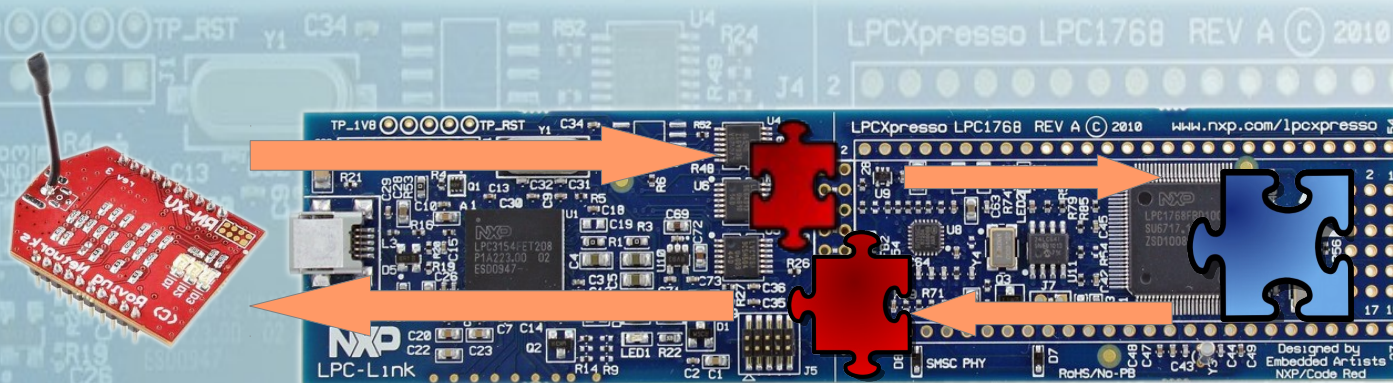
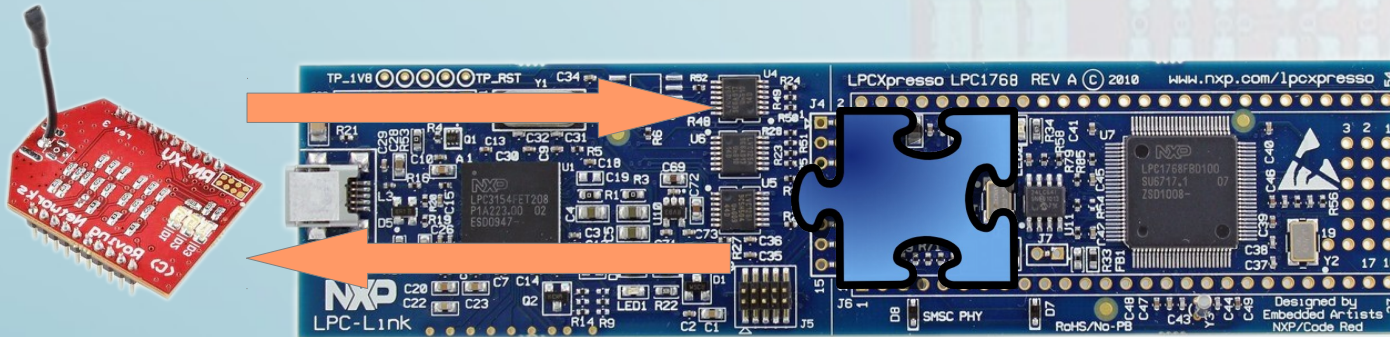
Diagrama de blocs



Problema



Soluciones



Demostració

```
javier@LynxNoopy: ~
Archivo  Editor  Ver  Terminal  Ayuda
exitl0*exit
Waiting for a command (get, set, run)
get
wsInType = http
wsOutType = http
wsInFile = wsInFile
wsOutFile = wsOutFile
wsInBytes = wsInBytes
wsOutBytes = wsOutBytes
wsInOffset = wsInOffset
wsOutOffset = wsOutOffset
wsOutTime = wsOutTime
wsOutRatio = wsOutRatio
wsInUrl = http://www.jrufas.hol.es/readFileBlock.php
wsOutUrl = http://www.jrufas.hol.es/writeFileBlock.php
wsGetInfo = wsGetInfo
cpType = deflate
cpFormat = gzip
cpInFileName = test1.txt
cpOutFileName = test1.txt.gz
cpOperation = 1
cpLevel = 9
exit
```

```
CuteCom
Open device Device: /dev/ttyUSB0 Parity: None
Close device Baud rate: 9600 Handshake:  Software  Hardware
About Data bits: 8 Open for:  Reading  Writing
Quit Stop bits: 1  Apply settings when opening

ScanForPattern (
)
responseBuffer:b31
ScanForPattern ()
exitCommandMode
-> exit
SendCommand(exit)
StartCommandMode ()
***scm: InCommandMode***
ScanForPattern (<2.32>)
-> exit
ScanForPattern ()
-> exit
ScanForPattern ()
```

Conclusions

✓ Adquisició d'experiència



✓ Bastiment



✓ Driver WiFly

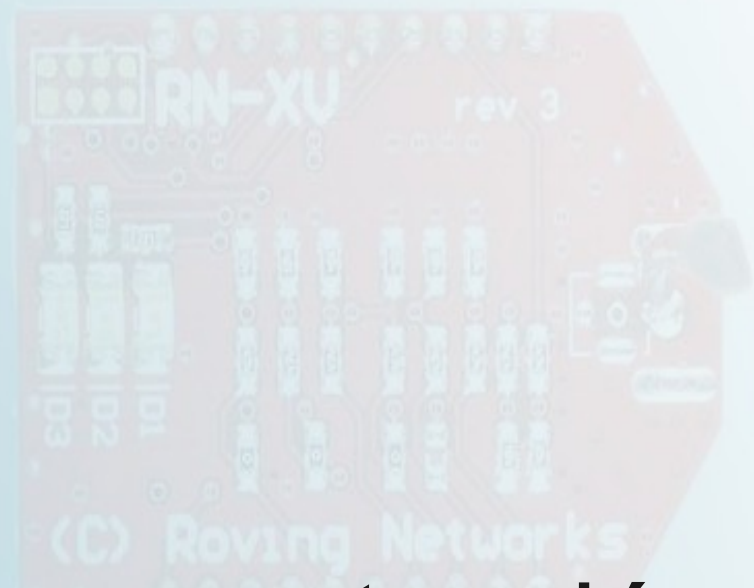


✓ Comandament remot



✓ Compressió FreeRTOS





Gràcies per la seva atenció

