

Adam's Yak Shaving Progress Report

mriblue - GDB debugging of
nRF52832 Cortex-M4F
microcontroller over Bluetooth Low
Energy

YAK SHAVING

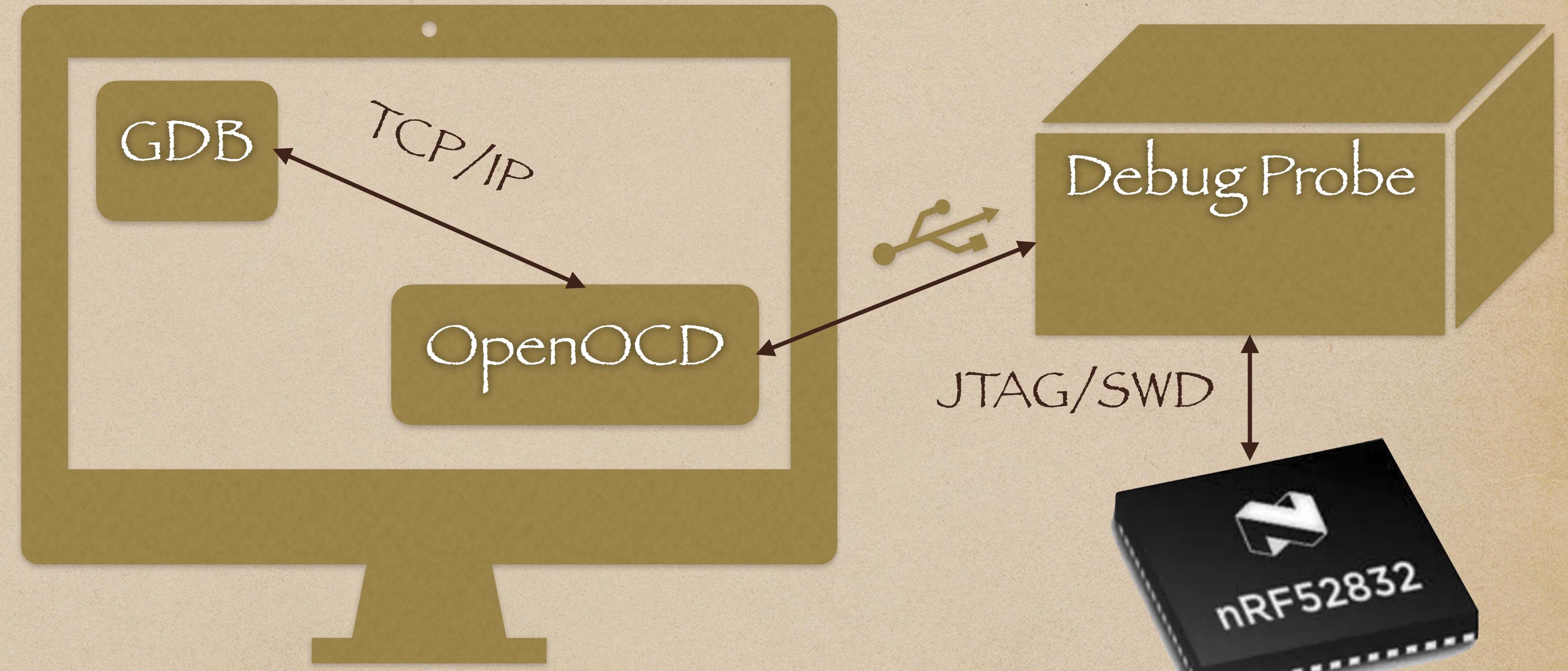
DOING 'Z TO DO 'Y TO DO 'X... SO YOU CAN DO 'A

WELL, I'M JUST GETTING WOOL TO
SELL AT THE MARKET TO RAISE SOME
MONEY TO BUY A LADDER TO REACH
THE ROOF TO FIX THE LEAK TO
STOP THE DRIP TO SAVE THE BOOKS
TO...

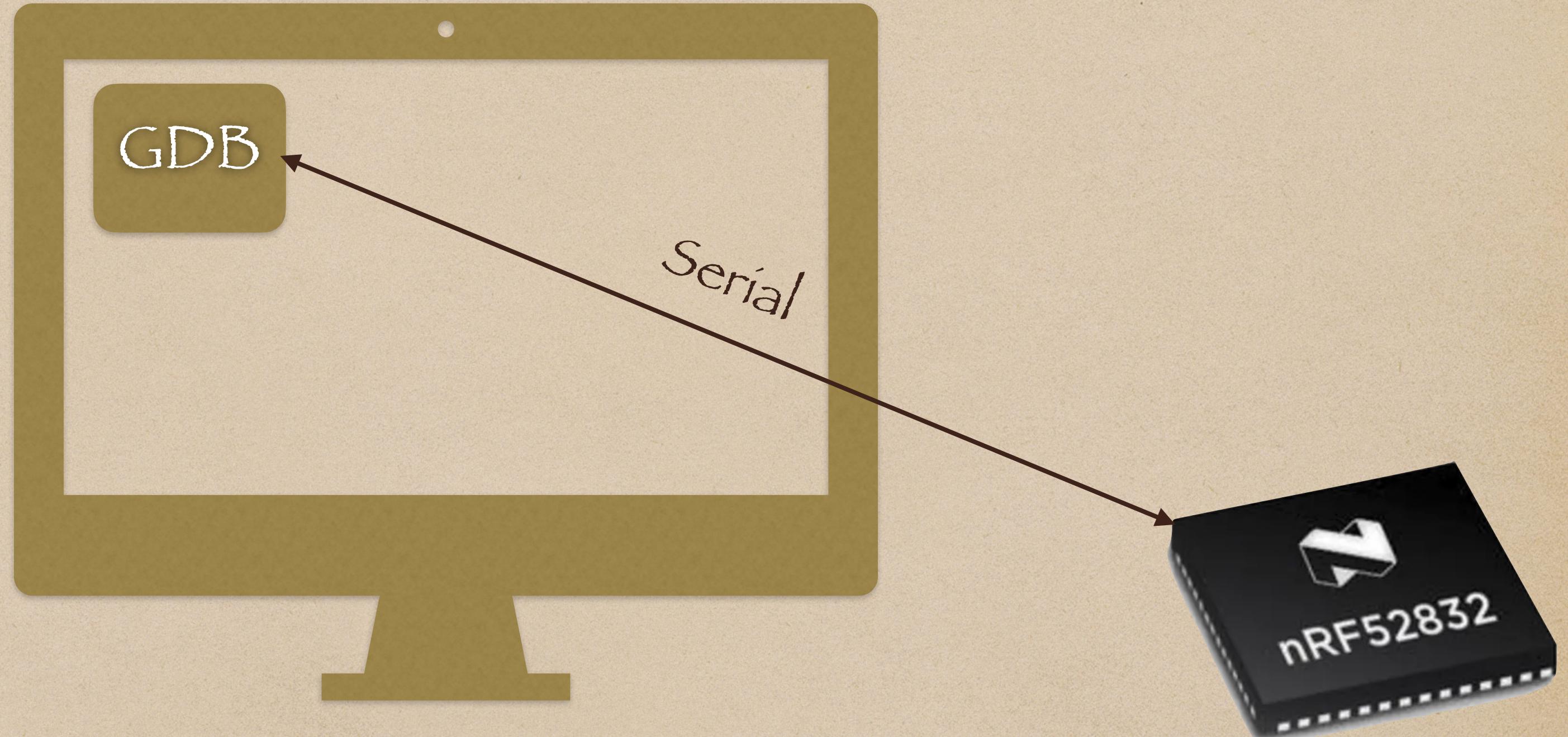


<https://sketchplanations.com/yak-shaving>

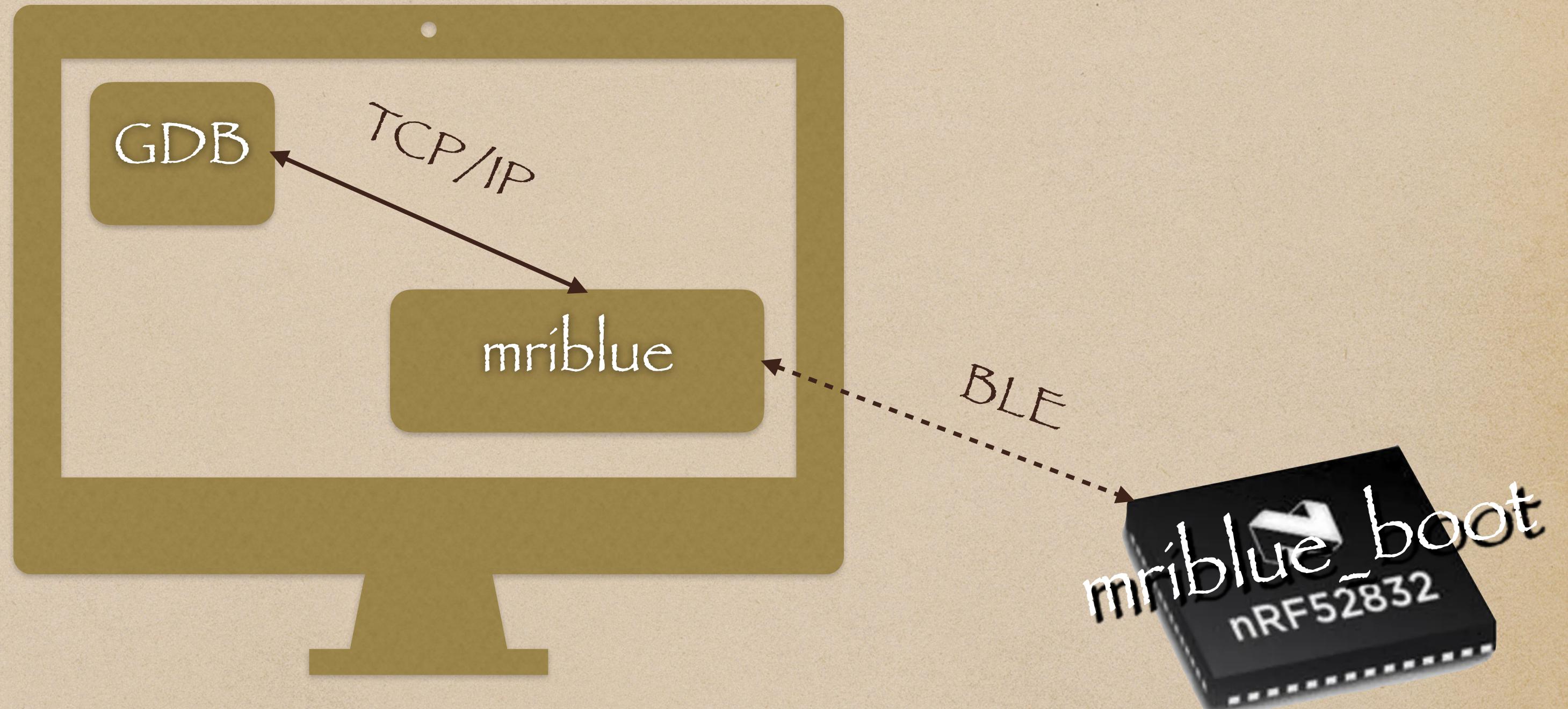
Typical Hardware Debugging Setup



MRI Debug Monitor Setup The Old Way



MRI Debug Monitor Setup The New Way



FLASH Memory Layout

0x00080000

Robot Code (272kB)

0x0003C000

Adam's Reserve :) (68kB)

0x0002B000

mriblue_boot (48kB)

0x0001F000

BLE Stack (124kB)

0x00000000

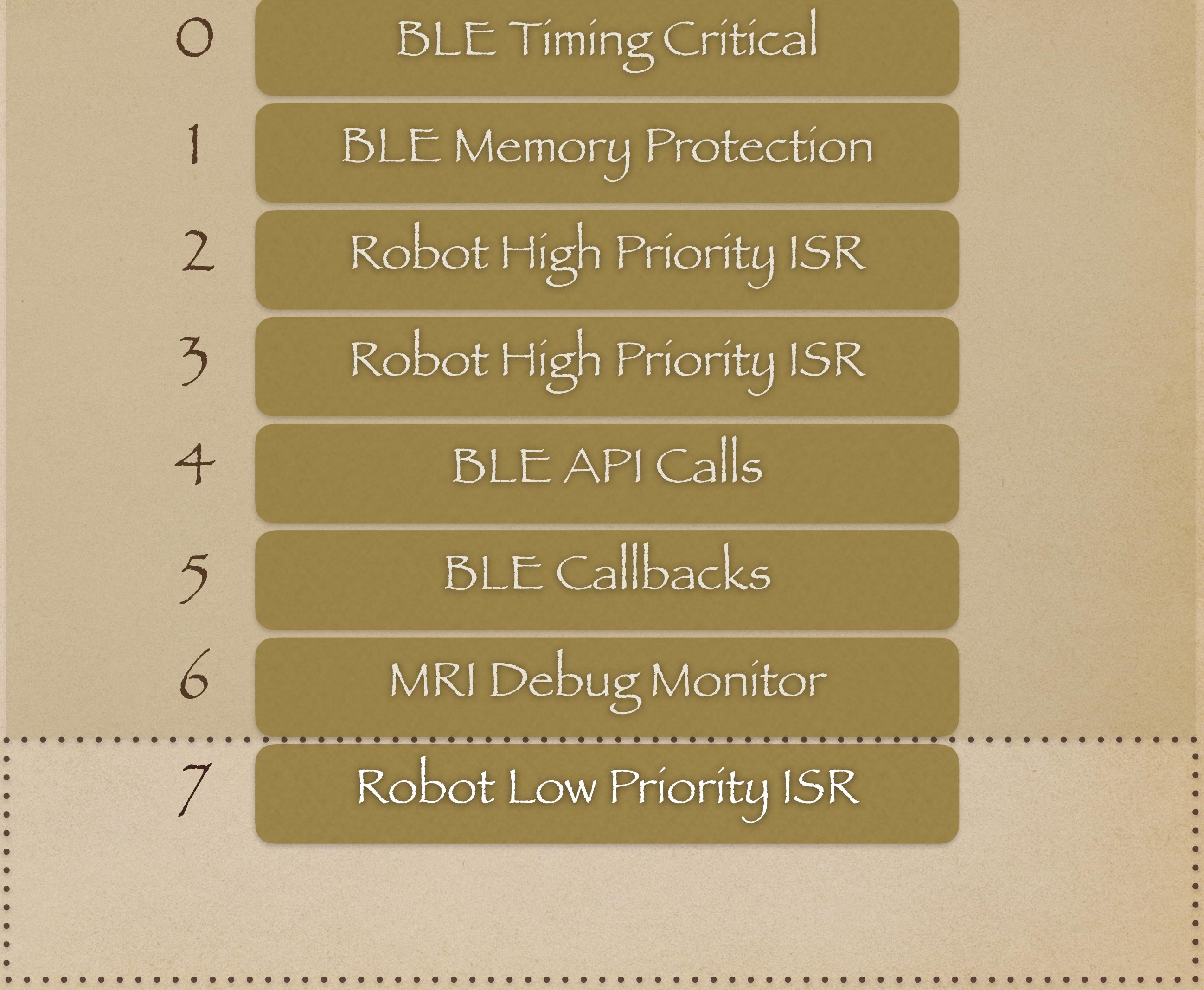
nRF52832

Priority Levels

0	BLE Timing Critical
1	BLE Memory Protection
2	Robot High Priority ISR
3	Robot High Priority ISR
4	BLE API Calls
5	BLE Callbacks
6	MRI Debug Monitor
7	Robot Low Priority ISR

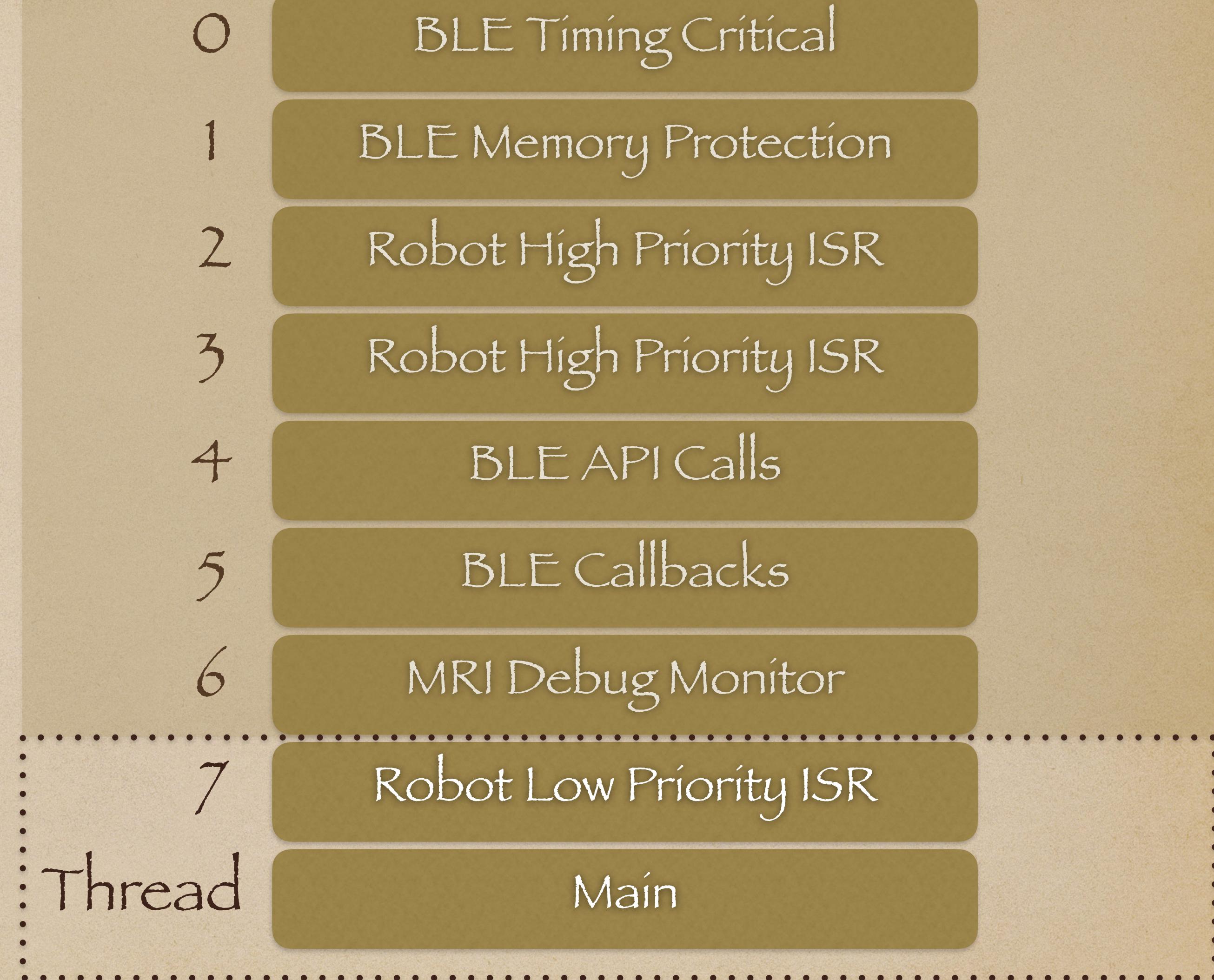
nRF52832

Priority Levels



nRF52832

Priority Levels



Demo

RugRover Project
<https://github.com/adamgreen/rugrover>

YAK SHAVING

DOING 'Z TO DO Y' TO DO 'X'... SO YOU CAN DO 'A'

WELL, I'M JUST GETTING WOOL TO
SELL AT THE MARKET TO RAISE SOME
MONEY TO BUY A LADDER TO REACH
THE ROOF TO FIX THE LEAK TO
STOP THE DRIP TO SAVE THE BOOKS
TO...



Sketchplanations

<https://sketchplanations.com/yak-shaving>