

gps_task.c

Gps_Task()

Start

Init GPS Neo M8 and
timepulse irq callback

Wait forever
for mGpsEvent

Allocate ressources to
new GPS NeoM8
measure structure

Extract RMC data from GPS
local buffer to allocated
ressource

Add data to
gGpsNewMeasureQ
queue

Queue
accept new
value

False

Free allocated ressources

True

Generate a
new gDevBoxAppEvent

new_data_available
_callback()

Generate
mGpsEvent

Toggle LED3

neo-m8.c

DSPI_MasterUserCallback()

End SPI
transaction

Save data to local buffer

Call callback function
from task

End

neo-m8.c

timepulse_irq_callback()

Timepulse
interrupt

Enable NEO M8
chip select

Read data from SPI
(non blocking)

Clear interrupt flag

End