```
  // now ALL of the bootstrapping is finished
  // we move to the processing phase below

  while (1) {
    // wait for TPU to indicate it has updated
    // shared memory, indicated by receipt of a flag
    tFlag = mcapi_sclchan_recv_uint8(tpu_chan, &err);
    CHECK_STATUS(err);

    // read the shared memory
    if (sMem[0] != 0) {
      // process the shared memory data
    } else {
     // PANIC -- there was an error with the shared mem
    }

    // now get data from the signal processing task
    // would be a loop if there were multiple sig tasks
    mcapi_pktchan_recv(sig_chan, (void **) &sDat, &tSize, &err);
    CHECK_STATUS(err);

    // Compute new carb params & update carb
  }
}
```