

```

tmp_endpt = mcapi_create_anonymous_endpoint(&err);
CHECK_STATUS(err);

// send the shmem handle
mcapi_msg_send(tmp_endpt, tpu_rmem_endpt, sMem,
               sizeof(sMem), &err);
CHECK_STATUS(err);

// connect the channels
mcapi_connect_pktchan_i(sig_endpt, sig_rmem_endpt,
                        &r1, &err);
CHECK_STATUS(err);

// wait on the connection
while (!mcapi_test(&r1, NULL, &err)) {
    // KEEP WAITING
}

// now open the channels
mcapi_open_pktchan_rcv_i(&sig_chan, sig_endpt,
                        &r1, &err);
CHECK_STATUS(err);

// wait on the channels
while (!mcapi_test(&r1, NULL, &err)) {
    // KEEP WAITING
}

// now ALL of the bootstrapping is finished
// we move to the processing phase below
while (1) {
    // NOTE - get an MRAPI lock
    mrapi_mutex_lock (sMem_mutex, &lock_key, 0,
                     &mrapi_status);
    CHECK_STATUS(mrapi_status);

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

    // NOTE - release the MRAPI lock
    mrapi_mutex_unlock(sMem_mutex, &lock_key,
                      &mrapi_status);
    CHECK_STATUS(mrapi_status);

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

    // Compute new carb params & update carb
}
}

```