// myo\_sfun.h

#ifndef MYO\_SFUN

#define MYO\_SFUN

// ==================================================

// Debug macros

//#define DEBUG\_MYO\_SFUN

//#define DEBUG\_MYO\_SFUN\_ITER

#ifdef DEBUG\_MYO\_SFUN

#define DB\_MYO\_SFUN(fmt, ...) ssPrintf(fmt, ##\_\_VA\_ARGS\_\_)

#else

#define DB\_MYO\_SFUN(fmt, ...)

#endif

#ifdef DEBUG\_MYO\_SFUN\_ITER

#define DB\_MYO\_SFUN\_ITER(fmt, ...) ssPrintf(fmt, ##\_\_VA\_ARGS\_\_)

#else

#define DB\_MYO\_SFUN\_ITER(fmt, ...)

#endif

// ==================================================

// Validation macros

#define IS\_PARAM\_SCALAR\_DOUBLE(pVal) ( \

mxIsDouble(pVal) && !mxIsComplex(pVal) && \

(mxGetNumberOfDimensions(pVal)==2) && \

(mxGetM(pVal)==1 && mxGetN(pVal)==1))

// ==================================================

// Configuration

#define BUFFER\_FRAMES\_DES 25 // initial size of data buffer in frames

// the frame rate is 25Hz so this default

// value 25 results in 1s latency

// program behavior

#define STREAMING\_TIMEOUT 5

#define INIT\_DELAY 1000 // [ms] to wait for Myo

#define BUFFER\_FRAMES\_MIN 1

#define SAMPLE\_TIME\_BLK 40 // [ms] sample time for the block

#define SAMPLE\_TIME\_IMU 20 // [ms] 50Hz

#define SAMPLE\_TIME\_EMG 5 // [ms] 200Hz

#define SAMPLES\_PER\_FRAME\_IMU SAMPLE\_TIME\_BLK/SAMPLE\_TIME\_IMU

#define SAMPLES\_PER\_FRAME\_EMG SAMPLE\_TIME\_BLK/SAMPLE\_TIME\_EMG

#define BUFFER\_DELAY ((1+BUFFER\_FRAMES\_DES)\*SAMPLE\_TIME\_BLK)

#endif // MYO\_SFUN