#ifndef \_\_MATRIXMUL\_H\_\_

#define \_\_MATRIXMUL\_H\_\_

#include <cmath>

using namespace std;

// Uncomment this line to compare TB vs HW C-model and/or RTL

//#define HW\_COSIM

#define MAT\_A\_ROWS 3

#define MAT\_A\_COLS 3

#define MAT\_B\_ROWS 3

#define MAT\_B\_COLS 3

typedef char mat\_a\_t;

typedef char mat\_b\_t;

typedef short result\_t;

// Prototype of top level function for C-synthesis

void matrixmul(

mat\_a\_t a[MAT\_A\_ROWS][MAT\_A\_COLS],

mat\_b\_t b[MAT\_B\_ROWS][MAT\_B\_COLS],

result\_t res[MAT\_A\_ROWS][MAT\_B\_COLS]);

#endif // \_\_MATRIXMUL\_H\_\_ not defined