\*\*\* IMPORTANT NOTE \*\*\*

Far Memory Support is only available in the PK51 package.

If you have an CA51, DK51, or Evaluation Package the far memory

support is not available and this example will not work.

The following example program shows you how to use the new features

of C51 Version 6.23 and LX51 Linker/Locater Version 3.23 to access

up to 4MB xdata and code space on classic 8051 devices.

In this example we are using 7 memory banks for xdata and 7 memory

banks for code. Refer to the "Macro Assembler and Utilities" User's

Guide, "Chapter 9. Linker/Locater - Bank Switching - Configuration

Examples: Banking with Common Area" for a hardware schematic that

matches to this tool configuration.

C51 provides you with the 'far' memory type that can be used to

access large memory. The memory accesses routines are part of the

L51\_BANK.A51 configuration file. The example includes a configured

version of the L51\_BANK.A51 file.

You may use the 'far' memory banking together with code banking

to expand the program code memory.

The 'far' memory type is handled at LX51 linker/locater level with

new memory classes:

HDATA memory class for the 'banked' xdata memory.

HCONST memory class for the 'banked' code memory.

To configure the LX51 Linker/Locater you the following options

under Options for Target - LX51 Locate:

Disable: Use Memory Layout from Target Dialog.

Enter under User Classes:

XDATA (X:0x0-X:0x7FFF), CODE (C:0x0-C:0x7FFF),

HDATA (X:0x028000-X:0x02FFFF, X:0x038000-X:0x03FFFF, X:0x048000-X:0x04FFFF,X:0x058000-X:0x05FFFF,

X:0x068000-X:0x06FFFF, X:0x078000-X:0x07FFFF, X:0x088000-X:0x08FFFF) ,

HCONST (B1:0x8000-B1:0xFFFF, B2:0x8000-B2:0xFFFF, B3:0x8000-B3:0xFFFF,B4:0x8000-B4:0xFFFF,

B5:0x8000-B5:0xFFFF, B6:0x8000-B6:0xFFFF, B7:0x8000-B7:0xFF