MCE II BOOT CODE Release Notes:

MCE II Boot v1.09 10-Dec-2001 LWIL

- A problem was fixed where the boot code would sometimes get stuck in a crash loop when a "warm" reset operation occured on some MCE boards. This was caused by a pending XILINX interrupt that was not handled correctly by the boot code.
- Added support for binary downloads of OVWR data blocks into flash.
- The BMM version of _MCE_Boot firmware uses 376 BBR Version 1.03
- Must be built against the baseline #2256.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.79 19-Oct-2001 *
  BCM v2.23 13-Nov-2001 *
  DF1 v1.06 21-Sep-2001 *   (new)
  ERR v1.34 20-Nov-2001 *
  MCE v1.96 07-Dec-2001 *
  MON v2.08 07-Dec-2001 *
  URT v1.23 19-Oct-2001 *
  UTL v1.61 20-Oct-2001 *   (* - denotes a changed subsystem)

MCE II Boot v1.08 05-Feb-2001 LWIL

- The Boot code’s fatal exception handler now drives the MCE "SPR_COMM" - J38 serial port instead of the J40 serial port. It has been enhanced to print out a register dump as well as the exception vector number and type.
- Fixed a potential DF1 re-entrancy bug. Could have caused outgoing DF1 packets to be corrupt or lost.
- The BMM version of _MCE_Boot firmware uses _376_Bbr Version 1.03
- Must be built against the baseline #2031.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.65 11-Sep-2000 *
  BCM v2.07 29-Jan-2001 *
  ERR v1.13 22-Jan-2001 *
  MCE v1.72 11-Jan-2001 *
  MON v1.52 21-Aug-2000 *
  URT v1.16 29-Jan-2001 *
  UTL v1.44 21-Nov-2000 *   (* - denotes a changed subsystem)

MCE II Boot v1.07 26-Jul-2000 LWIL

- This version of MCE BOOT code now uses the MCE's "SPR_COMM" J38 serial port connector for it's diagnostic use. (Previously it was using the J40 serial port) The BBR code still uses the J40 serial port connector.
- Fixed a bug in the interrupt handler for the MCE 16C554 uarts, that could have caused loss of TX interrupts when running in a full-duplex Tx/Rx interrupt mode.
- Fixed a TX interrupt driven bug in the MCE 16C554 uart code, where it would sometimes not start transmitting if the serial port had been closed, and then re-opened.
- Fixed a DF1 binary download/upload race condition bug. This bug fix improves the speed at which you can download satellite firmware through the MCE Board. Previously you could only reliably download at 9600 baud. You can now download satellite f/w at 57600 baud.
- Added a serial port loopback test. Command syntax is: "test serial <level> <baud> <port>" where <level> =1, or 2; <baud> is the desired baud rate; <port> is URT serial port handle. The test just echos back each character that it receives. Level 1 test is code hooked very close to the uart interrupt handlers, and level 2 test is code that makes use of the uart drivers normal character buffers.
- The BMM version of _MCE_Boot firmware uses _376_Bbr Version 1.02
- Must be built against the baseline #1610.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.64 24-Jul-2000 *
  BCM v2.05 07-Jul-2000 *
  ERR v1.11 27-Jan-2000
  MCE v1.68 25-Jul-2000 *
  MON v1.50 11-Apr-2000 *
  URT v1.14 20-Jul-2000 *
  UTL v1.39 13-Jun-2000 * (* - denotes a changed subsystem)

MCE II Boot v1.06 10-Mar-2000 LWIL

- The 'bload xxx' command will now use the same diagnostic serial port baud rate as the boot code monitor prompt was using. Previously it was being forced to 57600 for the binary Df1 protocol. This allows using the Bload.exe program to download main firmare at slower (than 57600) baud rates if needed.
- The BMM version of _MCE_Boot firmware uses _376_Bbr Version 1.02
- Must be built against the baseline #1512.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.60 07-Mar-2000 *
  BCM v2.02 14-Dec-1999
  ERR v1.11 27-Jan-2000
  MCE v1.64 08-Mar-2000 *
  MON v1.47 08-Mar-2000 *
  URT v1.13 26-Nov-1999
  UTL v1.34 06-Mar-2000 * (* - denotes a changed subsystem)

MCE II Boot v1.05 22-Feb-2000 LWIL

- Disabled the WorkStation serial port interrupts while downloading in binary DF1 protcol on the 68376's diagnostic serial port. They are restored at the end of the binary download. This is only done when performing a binary download initiated by the 'bload xxx' monitor command. (as used by the bload.exe tool)
- Supports the POST firmware module correctly (cold entry point/registers).
- The BMM version of _MCE_Boot firmware uses _376_Bbr Version 1.02
- Must be built against the baseline #1498.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.59 15-Feb-2000 *
  BCM v2.02 14-Dec-1999
  ERR v1.11 27-Jan-2000 *
  MCE v1.60 16-Feb-2000 *
  MON v1.45 16-Feb-2000 *
  URT v1.13 26-Nov-1999
  UTL v1.32 14-Jan-2000 * (* - denotes a changed subsystem)

MCE II Boot v1.04 13-Jan-2000 LWIL

- Supports Save/Restore of BBRam/Flash NVS memory via the diagnostic monitor commands 'fw load nvs flash|ram', and 'fw save nvs flash|ram'.
- Will now locate and execute the POST module if found in the firmware directory table in flash.
- Supports binary download of the POST firmware module, via the 'fload', 'fw load post' and the 'bload' monitor commands. Also supported via a BCM workstation binary download. The 'fw dir' command now supports display of the POST module.
- Now supports the "fw load xxx" monitor command. This is an alternate command syntax used to perform a binary DF1 firmware download.
- The Boot code will now respond to the RIF command RIF_COMMAND_ALL_QUERYSTATUS (0004) without displaying an Error message to the diagnostic serial port.
- When issuing the 'reset boot' command, the error message about a watchdog timeout error (#2800) has been suppressed. (fixed in 376 subsystem)
- Fixed bug in MON_Printf() in MBTws.c, regarding print Rif_Command value.
- Must be built against the baseline #1467.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.57 06-Jan-2000 *
  BCM v2.02 14-Dec-1999
  ERR v1.08 23-Nov-1999
  MCE v1.53 12-Jan-2000 *
  MON v1.42 25-Nov-1999
  URT v1.13 26-Nov-1999
  UTL v1.31 13-Dec-1999 (* - denotes a changed subsystem)

MCE II Boot v1.03 15-Dec-1999 LWIL

- The Binary firmware image will now have an embedded Version and Copyright string in the code.
- Fixed a bug in the DF1 binary download code for the physical memory read/write services.
- Now supports the BBR v1.01 and newer. The 'reset bbr' monitor command will restart the board into the BBR code/mode.
- The BMM version of _MCE_Boot firmware uses _376_Bbr Version 1.01
- MUST be linked against baseline build #1446 or newer.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.53 08-Dec-1999 *
  BCM v2.02 14-Dec-1999 *
  ERR v1.08 23-Nov-1999 *
  MCE v1.46 13-Dec-1999 *
  MON v1.42 25-Nov-1999 *
  URT v1.13 26-Nov-1999 *
  UTL v1.31 13-Dec-1999 * (* - denotes a changed subsystem)

MCE II Boot v1.02 27-Oct-1999 LWIL

- Added the BCM/RIF (RCON) binary protocol to the WorkStation serial port. The ServiceShell can now query, reset, and download LCA or MAIN firmware via the workstation serial port.
- The MCE Boot code is now using the external sram on the MCE II board. Previous versions were only using internal 68376 ram.
- Added a 30 second timeout to the DF1 binary download mode. If no valid DF1 packets are received in a 30 second time span, the binary download mode will be terminated and go back to the ascii monitor prompt.
- MUST be linked against baseline build #1411 or newer.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.42 26-Oct-1999
  MCE v1.41 26-Oct-1999
  ERR v1.07 18-May-1999
  URT v1.12 11-Jun-1999
  MON v1.39 14-Oct-1999
  UTL v1.27 11-Oct-1999
  BCM v1.97 22-Oct-1999

MCE II Boot v1.01 19-Oct-1999 LWIL

- 68376 Watchdog is now set to 838msec (previously was 200msec)
- The MCEBMM.BIN release of the MCE II boot code now comes with the newer generic 68376 BBR code v1.00. (not operational yet)
- Added new command: "boot nvramclear". This command will clear the 32k NV Ram to all 0xff's. Usefull to do on new MCE II boards.
- Added new DF1 binary download protcol. ("bload xxxx" commands) Use the new 'bload.exe' win32 utility with this binary download protocol.
- MUST be linked against baseline build #1404 or newer.
- This version of MCE II boot code contains the following baseline subsystems:
  376 v1.41 21-Sep-1999
  MCE v1.40 15-Oct-1999
  ERR v1.07 18-May-1999
  URT v1.12 11-Jun-1999

MON v1.39 14-Oct-1999
UTL v1.27 11-Oct-1999

MCE II Boot v1.00 06-Oct-1999 LWIL

- Debugged on the MCE II board.
- This version of the MCE boot code is only for the newer MCE II board.
  It no longer supports the original MCE I board.
- MUST be linked against baseline build #1395 or newer.