SATELLITE BOARD BOOT CODE Release Notes:

SAT Boot v1.09 19-Apr-2001 LWIL

- The SAT Boot code will now query onboard flash NVS to determine what CAN Bus baud rate it should be running at. The default if no parameter is found in flash NVS is 500KHz. The previous CAN Bus baud rate was 909KHz. The supported CAN Bus baud rates are: 1000, 909, 769, 500, 250, 125, and 62.5KHz.
- Fixed a problem, where if the monitor command "reset boot" was given, and the stay-in-boot jumper was not installed, and we had not yet run the main firmware, then the next invocation of the boot code would not have it's normal monitor output strings, or monitor (keyboard) input. It would appear to be dead from the diagnostic monitor.
- The PDB board's "VERSION REGISTER" pcb jumpers (3), are now used to indicate the PDB board's SCON board ID. Previously all PDBs used SCON board id of 10H. With no jumpers installed (the default) the SCON ID will still be 10H. Using the version register jumpers, the PDB SCON board ID can now range from 10H to 17H. This change was done to accomadate multiple PDB boards on the same SCON (CAN) bus.
- Removed the "fload xxx" monitor commands. This should no longer be used. The "bload xxx" monitor commands should be used in conjunction with the bload.exe download utility.
- This version of _SAT_Boot firmware uses/requires _376_Bbr Version 1.03
- This version of _SAT_Boot firmware was built using the following baseline components: Baseline Build #2086 built: Apr. 19, 2001.
  376: 1.70 12-Apr-2001 *
  DF1: 1.03 20-Mar-2001 *
  ERR: 1.19 12-Apr-2001 *
  MON: 1.69 17-Apr-2001 *
  SAT: 1.43 26-Feb-2001 *
  SIF: 1.29 08-Apr-2001 *
  STG: 1.15 06-Dec-2000 *
  URT: 1.18 15-Mar-2001 *
  UTL: 1.47 10-Apr-2001 *

SAT Boot v1.08 05-Feb-2001 LWIL

- Improved the CPU's Fatal Exception Handler. If a Fatal Exception occurs, the handler will now print out a CPU register dump, including the exception vector number and type.
- This version of _SAT_Boot firmware uses/requires _376_Bbr Version 1.03
- This version of _SAT_Boot firmware was built using the following baseline components: Baseline Build #2031 built: Feb. 05, 2001.
  376: 1.65 11-Sep-2000 *
  ERR: 1.13 22-Jan-2001 *
  MON: 1.52 21-Aug-2000 *
  SAT: 1.41 12-Jan-2001 *
  SIF: 1.22 03-Nov-2000 *
  URT: 1.16 29-Jan-2001 *
  UTL: 1.44 21-Nov-2000 *

SAT Boot v1.07 11-Aug-2000 LWIL

- Fixed a race condition bug in (serial port) DF1 binary download protocol.
- A DF1 serial port driver re-entrancy bug was fixed. May have caused DF1 outgoing packets to be corrupted or lost. This problem would ONLY occur on satellite boards that were being used as an RS232 serial gateway to the CAN bus. This is an optional firmware feature that must be enabled via the RS232 diagnostics serial port of the satellite board.
- When restoring ascii mode (from DF1 binary download) the DF1 drivers no longer hard-code the console baud rate to 57600. They will restore it to what is was previously running at. (At this time there is no way to change the default baud rate of the SAT Boot code though)
- This version of _SAT_Boot firmware uses/requires _376_Bbr Version 1.02
- This version of _SAT_Boot firmware was built using the following baseline components: Baseline Build #1622 built: Aug. 11, 2000.
  376: 1.64 24-Jul-2000 *
  ERR: 1.11 27-Jan-2000
  MON: 1.51 27-Jul-2000 *
  SAT: 1.24 10-Aug-2000 *
  SIF: 1.18 05-Apr-2000
  URT: 1.14 20-Jul-2000 *
  UTL: 1.39 13-Jun-2000 *

SAT Boot v1.06 12-Apr-2000 LWIL

- Fixed an SCON protocol bug, where when a NAK packet was being sent, the error code byte was always set to 00.
- This version of _SAT_Boot firmware uses/requires _376_Bbr Version 1.02
- This version of _SAT_Boot firmware was built using the following baseline components: Baseline Build #1536 built: Apr. 12, 2000.
  376: 1.60 07-Mar-2000 *
  ERR: 1.11 27-Jan-2000
  MON: 1.50 11-Apr-2000 *
  SAT: 1.22 17-Feb-2000 *
  SIF: 1.18 05-Apr-2000 *
  URT: 1.13 26-Nov-1999
  UTL: 1.38 31-Mar-2000 *

SAT Boot v1.05 31-Jan-2000 LWIL

- The Boot code no longer automatically sends it’s sign-on messages out the diagnostic serial port (at 57600b). It will now only due this if:
  1.) The Stay-In-Boot jumper is installed
  2.) The BMM vard is plugged in and being used to boot from
  3.) The ’Reset Boot’ command was given from the diagnostic serial port while running the main firmware.
- Now supports the CAN controller and the Firmware Control Register Virtual Register set. This functionality is used to allow firmware downloads across the CAN bus.
- 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.
- This version of _SAT_Boot firmware uses/requires _376_Bbr Version 1.02

- This version of _SAT_Boot firmware was built using the following baseline components:
  Baseline Build #1482 built: Jan. 31, 2000.
  376: 1.58 17-Jan-2000 *
  ERR: 1.11 27-Jan-2000 *
  MON: 1.44 28-Jan-2000 *
  SAT: 1.21 17-Jan-2000 *
  SIF: 1.17 26-Jan-2000 * (new subsystem added)
  URT: 1.13 26-Nov-1999
  UTL: 1.32 14-Jan-2000

SAT Boot v1.04 29-Nov-1999 LWIL\RHIN

- Added new DF1 binary download protcol. ("bload xxxx" commands) Use the new 'bload.exe' win32 utility with this binary download protocol.
- SAT Boot code has been re-written to fit the FW1 (larger) MON/printf code stream model.
- This version of _SAT_Boot firmware was built using the following baseline components:
  Baseline Build #1434 built: Nov. 29, 1999
  376: 1.46 19-Nov-1999
  ERR: 1.08 23-Nov-1999
  URT: 1.13 26-Nov-1999
  MON: 1.42 25-Nov-1999
  UTL: 1.28 16-Nov-1999
- This version of _SAT_Boot firmware uses the (unfinished) _376_Bbr Version 1.00

SAT Boot v1.03 15-Oct-1999 LWIL

- Fixed QSPI setup for the GENINE board. Now supports GENINE Rev B boards.
- Now supports the new 'generic' 68376 BBR code module instead of the previous assembler BBR stub.
- Built against Baseline 1401.
- Uses SMN (Small Monitor) Subsystem v1.05
- The BMM Rom binary image (Satbmm.Bin) uses the generic 68376 BBR code version 1.00.

SAT Boot v1.02 06-Aug-1999 LWIL\RHIN

- Added support for PDB Rev. 'B' hardware board.
- Added support for GENINE I/O board.
- This boot code has only been tested on PDB Rev. 'A', and ALICE boards. The PDB Rev. 'B' and GENINE boards do not yet exist.
- Does not yet drive the CAN bus.

SAT Boot v1.01 07-Jun-1999 LWIL

- Removed hard-coded boardtype setting to ALICE. Should now work/detect the PDB board.
- Does not yet drive the CAN bus.

SAT Boot v1.00 04-May-1999 LWIL

- The first 'real' version of the SAT boot code for both ALICE and PDB boards. Not yet tested, as the h/w does not yet exist.
- Does not yet drive the CAN bus.
- Does NOT run on the ICE boards at all.

SAT Boot v1.01 13-Apr-1999 LWIL

- Fixed timeout problem in binary download. Now times out after 10 seconds. Note that the very first download character still has no timeout on it.
- Changed binary download code, to not erase the flash sector containing the FW Directory untill after a successfull download has completed. This fixes problems when a binary download is aborted, and the FW DIR table is left empty.
- Only runs on ICE boards, Rev 'A' and 'Rev 'B'.

SAT Boot v1.00 05-Mar-99 LWIL

- First version of Satellite Boot code, only runs on ICE boards, Rev 'A' and 'Rev 'B'.
- Does not yet drive the CAN bus.