TABLE 1. Back End Processor Memory Map Overview

Virtual Address	Byte Size	Name	Use
0xbfc00000	0x8000	Boot ROM	Contains Bootstrap loader software (see TBD) and Microboot Control Word (see Section 4.2.1)
0xbf800000	N/A	External Debug Board	Debug board used for development/pre-flight testing
0xbf400000	0x30	Mongoose CSI Subblock	see Section 4.2
0xb8000000	0x100000	Flight ROM	Contains the delivered image of the instrument software code and initialized data. This image is copied into I-cache and D-cache by the Bootstrap loader software.
0xa8000000	0x7ff0000	FEP Shared Memory Addresses	Shared FEP RAM used for mailboxes, ring-buffers, and bias maps and bias parity planes.
0xa0180000	N/A	BEP I/O Devices	see below
0xa0000000	1 MB	Bulk Memory and FEP Shared Memory Addresses	BEP-populated RAM used for telemetry buffers.
0x80080000	0x80000	Instruction Cache (SEU-immune)	Contains copy of patched and running code. Since this RAM can only be written to via the Mongoose CSI (see Section 4.2.4), portions of this area are used to preserve patch lists, system configuration parameters, science parameter blocks, and DEA parameter blocks across resets.
0x80000000	0x20000	Data Cache (SEU-immune)	Contains copy of patched initialized data. Used for run-time stacks, RTX resources, and program data.