

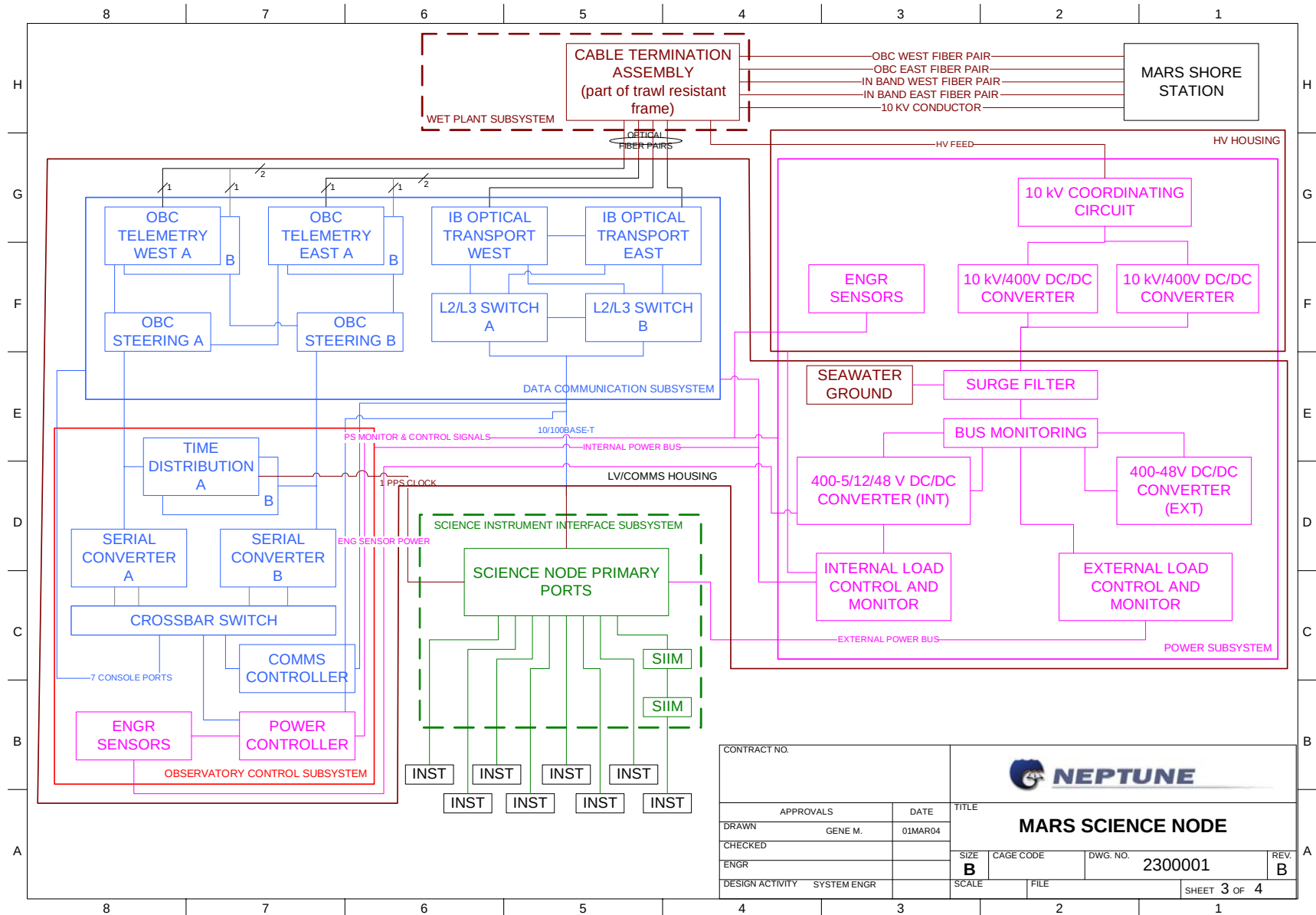
The diagram illustrates the top-level architecture of the Mars Science Node (MSN) and its connection to the Secondary Node and various instruments. The MSN is connected to the Secondary Node via an Extension Cable. The Secondary Node is connected to the Science Instrument Interface Module (SIIM) and the Science Instrument Interface Subsystem (SIIS). The SIIS is connected to the Science Instrument Interface Module (SIIM) and the Science Instrument Interface Subsystem (SIIS). The SIIS is connected to the Science Instrument Interface Module (SIIM) and the Science Instrument Interface Subsystem (SIIS). The SIIS is connected to the Science Instrument Interface Module (SIIM) and the Science Instrument Interface Subsystem (SIIS).

CONTRACT NO.

APPROVALS		DATE	TITLE	
DRAWN	GENE M.	01MAR04	MARS TOP LEVEL BLOCK DIAGRAM	
CHECKED			SIZE	CAGE CODE
ENGR			B	
DESIGN ACTIVITY	SYSTEM ENGR		DWG. NO.	REV.
			2300001	B
SCALE		FILE	SHEET 2 OF 4	

CONTRACT NO.		 NEPTUNE					
APPROVALS						TITLE	
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DRAWN		SIZE	CAGE CODE	DWG. NO.	REV		
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DESIGN ACTIVITY		SCALE		FILE	SHEET 2 of 4		
SYSTEM ENGR							

MARS SCIENCE NODE



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DRAWN GENE M.	01MAR04	MARS SCIENCE NODE	
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ENGR		DWG. NO. 2300001	REV. B
DESIGN ACTIVITY	SYSTEM ENGR	SCALE	FILE
		SHEET 3 OF 4	

SCIENCE INSTRUMENT INTERFACE MODULE

- Small, configurable, multi-purpose device to connect a variety of instruments as well as extension cables to the primary science port
- Functionality as currently envisioned for NEPTUNE includes various combinations of the following
 - Voltage conversion
 - Convert 10/100BaseT to RS232 or RS422
 - Convert 10/100Base-T and 1 PPS to optical signals for driving extension cables
 - Plug & Work functionality: Meta-data and driver insertion
- Packaging options: stand alone, inside an instrument, ideally inside a wet mate-able connector

NEPTUNE SIIM CONCEPTUAL BLOCK DIAGRAM

