



GLAST Mission Interface Change Notice (ICN)

ICN No.
025

SPECTRUMASTRO

SHEET 1 OF 3

ORIGINATOR: Tim Morse **PHONE:** 480-892-8200 **DATE:** 9-29-03

CHANGE TITLE: Add SC RT address to 1553 Protocol Document **ORG:** Spectrum Astro

DOCUMENT NUMBER	TITLE	VERSION
1196-EI-S46310-000	1553 Bus Protocol Document	-

REASON FOR CHANGE:
 Add the Spacecraft RT addresses to the 1553 Protocol Document.

PROPOSED CHANGE:

INSTRUMENT IMPACT

- Cost
- Schedule

SPACECRAFT IMPACT

- Cost
- Schedule

ORIGINATOR SIGNATURE:

APPROVAL SIGNATURES:

Spectrum Instrument Interface Lead – Tim Morse

Spectrum Program Manager – Al Lepore


 Instrument Systems Engineer



 Instrument Program Manager

Table 4-2. CCSDS Telecommand and Telemetry APID Allocation

Assignee	Data Type	APID Range	# APIDs
BC – S/C FSW	Housekeeping telemetry	0x000 – 0x05F	96
	Diagnostic telemetry	0x060 – 0x0BF	96
	Alert telemetry	0x0C0 – 0x11F	96
	Telecommands	0x600 – 0x63F	64
	Broadcast Telecommand	0x701	1
RT 3 – LAT	Housekeeping telemetry	0x200 – 0x25F	96
	Diagnostic telemetry	0x260 – 0x33F	224
	Alert telemetry	0x340 – 0x39F	96
	Science Telemetry (LVDS only)	0x3A0 – 0x3FF	96
	Telecommands	0x640 – 0x69F	96
	Broadcast Telecommand	0x702	1
RT 6 – GBM	Housekeeping telemetry	0x400 – 0x45F	96
	Diagnostic telemetry	0x460 – 0x53F	224
	Alert telemetry	0x540 – 0x59F	96
	Science Telemetry (LVDS only)	0x5A0 – 0x5FF	96
	Telecommands	0x6A0 – 0x6FF	96
	Broadcast Telecommand	0x703	1
RT 7 – SIRU A			
RT 22 – SIRU B			
RT 9 – Star Tracker 1			
RT 12 – Star Tracker 2			
RT 15 – Star Tracker 3			

Table A-1. Itemized Instrument 1553 Remote Terminal and Subaddresses

Device	RT Address	Sub-address	1553 Tranx	Data Words	Description
LAT (primary and redundant)	3	11 - 25	RT Transmit	32 * 15	Instrument CCSDS Telemetry
		26	RT Receive	1	Telemetry "Done" Indicator
		27	RT Receive	31	Instrument CCSDS Telecommand
		29	RT Transmit	32	Instrument Originated Telecommand
		30	RT Rcv/Tx	1 to 32	Data Wrap-Around
GBM (primary and redundant)	6	11 - 25	RT Transmit	32 * 15	Instrument CCSDS Telemetry
		26	RT Receive	1	Telemetry "Done" Indicator
		27	RT Receive	31	Instrument CCSDS Telecommand
		29	RT Transmit	32	Instrument Originated Telecommand
		30	RT Rcv/Tx	1 to 32	Data Wrap-Around
SIRU-A	7				
SIRU-B	22				
Star Tracker 1	9				
Star Tracker 2	12				
Star Tracker 3	15				