 SPECTRUMASTRO		GLAST Mission Interface Change Notice (ICN)		ICN No.	027
				SHEET	1 OF 3
ORIGINATOR: Tim Morse		PHONE: 480-892-8200		DATE: 10-6-03	
CHANGE TITLE: LAT Discrete Control Command Logic and Signal Names				ORG: Spectrum Astro	
DOCUMENT NUMBER		TITLE		VERSION	
1196-EI-Y46311-000		LAT-SC ICD		A	
REASON FOR CHANGE: The LAT and SC have agreed to use negative (active low) logic on all LVDS signals, including the digital control reset to the LAT. This ICN captures that logic and removes the TBR on the signal width on the pulses and renames the signals to be consistent with the wiring pin-out names (Appendix B).					
PROPOSED CHANGE: See next page for updated table in ICD.					
INSTRUMENT IMPACT <input type="checkbox"/> Cost <input type="checkbox"/> Schedule					
SPACECRAFT IMPACT <input type="checkbox"/> Cost <input type="checkbox"/> Schedule					
ORIGINATOR SIGNATURE:					
APPROVAL SIGNATURES:					
Spectrum Instrument Interface Lead – Tim Morse			Spectrum Program Manager – Al Lepore		
<i>L. Clausen for Dick Horn 10/10/03</i> Instrument Systems Engineer – Dick Horn			<i>Lowell Klaisner 10/10/03</i> Instrument Program Manager – Lowell Klaisner		

6.4.3.2 Discrete Control Commands

The SC shall provide sixteen (16) digital commands to the LAT as shown in Figure 6-16.

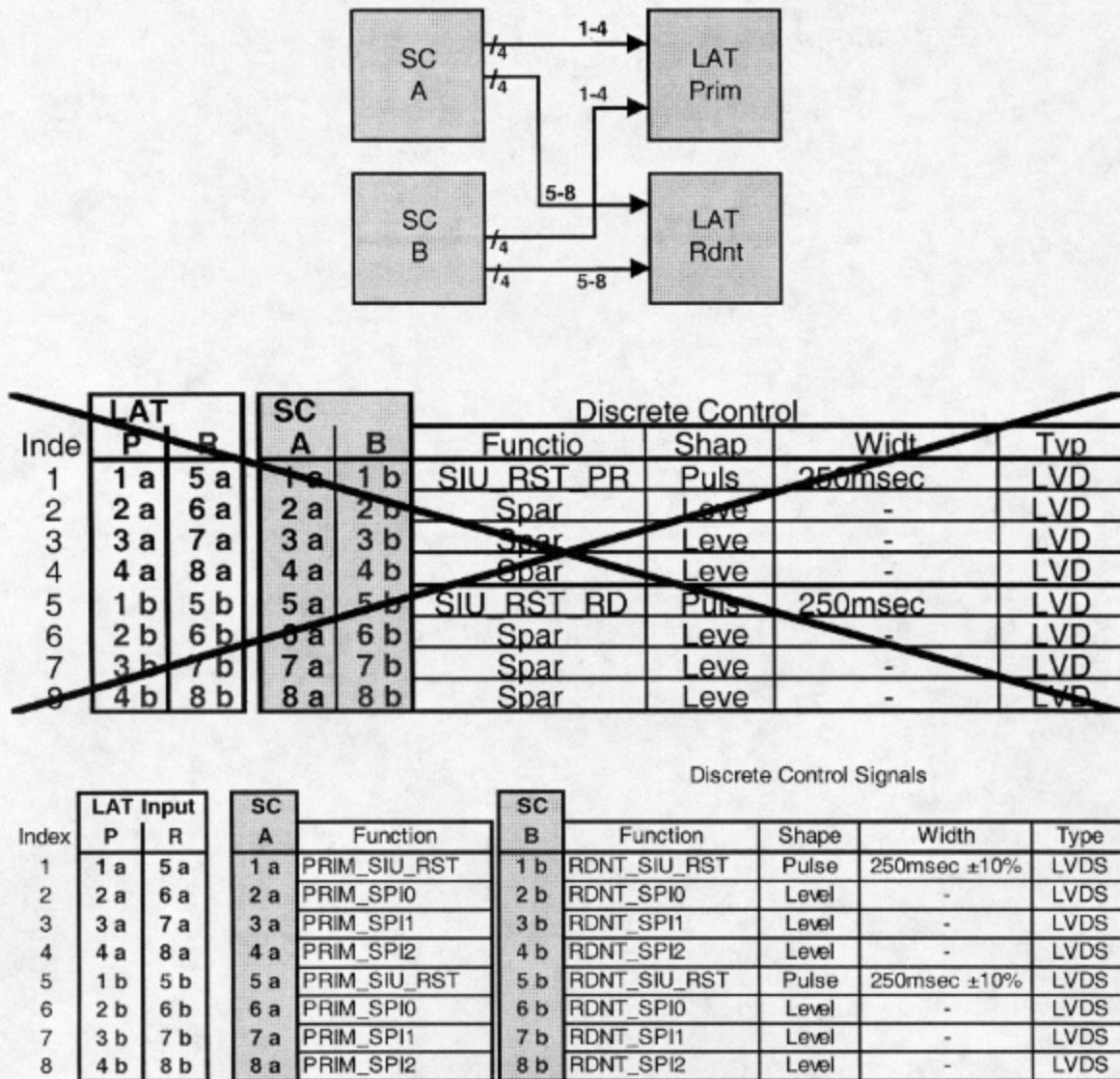


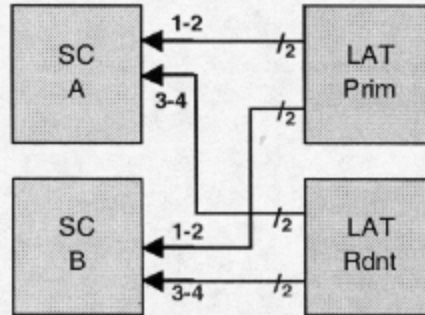
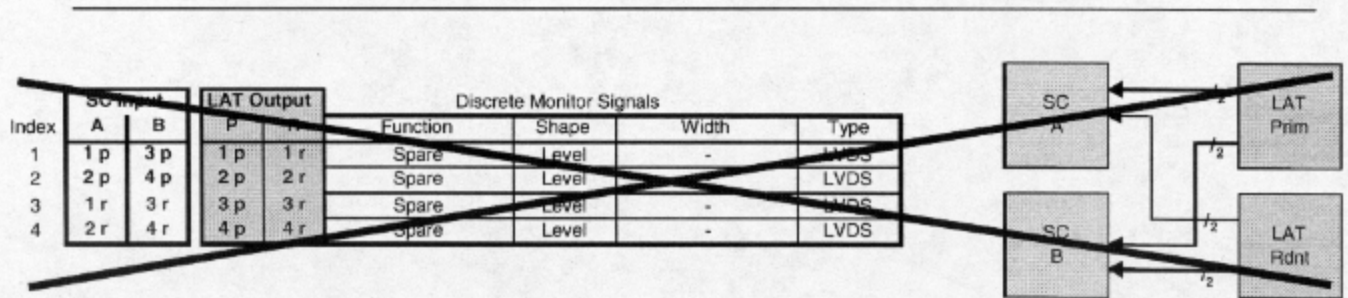
Figure 6-16. LAT Discrete Control Signal Characteristics (TBR-SAT)

6-16. 6.4.3.2.1 Digital Control Circuit and Signal Characteristics

The digital control signal characteristics shall be of LVDS type. All signals shall use negative (active low) logic. The LAT shall have a 100 Ω ±10 Ω terminator on the differential input signals as shown in Figure 6-17.

6.4.3.3 Discrete Monitor Signal Telemetry

The SC shall monitor four (4) eight (8) digital signals from the LAT for configuration status as shown in Figure 6-18.



Index	LAT Output		Discrete Monitor Signals						
	P	R	SC A	Function	SC B	Function	Shape	Width	Type
1	1 a	3 a	1 a	PRIM_SPO0	1 b	RDNT_SPO0	Level	-	LVDS
2	2 a	4 a	2 a	PRIM_SPO1	2 b	RDNT_SPO1	Level	-	LVDS
3	1 b	3 b	3 a	PRIM_SPO0	3 b	RDNT_SPO0	Level	-	LVDS
4	2 b	4 b	4 a	PRIM_SPO1	4 b	RDNT_SPO1	Level	-	LVDS

Figure 6-18. Discrete Monitor Signal Telemetry