



LAT Project Office – SLAC

DCN No.  
LAT-XR-

### DOCUMENT CHANGE NOTICE (DCN)

SHEET 1 OF 2

<b>ORIGINATOR:</b> Michael Amato	<b>PHONE:</b> 301-286-3914	<b>DATE:</b> 2/8/02
<b>CHANGE TITLE:</b> Combination of all updates from past six months plus changes to trigger width and delays.		<b>ORG.:</b> NASA GSFC
<b>DOCUMENT NUMBER</b>	<b>TITLE</b>	<b>NEW REV.</b>
LAT-SS-00016	LAT ACD Subsystem Specification - Level III Specification	Draft 13-controlled release 2

**CHANGE DESCRIPTION (FROM/TO):**  
 1.) Eliminated pure text section of reqs and put all information in table only.  
 2.) Added links to level 2 reqs,  
 3.) Updated some boilerplate sections (i.e. document tree)  
 4.) Corrected old information, updated new values and terminology in some reqs, in clarified confusions.  
 5.) Added modifications due to trigger width and delay changes recently proposed by LAT.  
 DETAILED LIST OF CHANGES IS ON PAGE 2 OF THIS DOCUMENT.

**REASON FOR CHANGE:**  
 reqs were out of date. wanted to change document format a little and add links to higher reqs. and trigger changes modified some reqs

**ACTION TAKEN:**  Change(s) included in new release  DCN attached to document(s), changes to be included in next revision  
 Other (specify):

<b>DISPOSITION OF HARDWARE (IDENTIFY SERIAL NUMBERS):</b>	<b>DCN DISTRIBUTION:</b>
<input type="checkbox"/> No hardware affected (record change only)	
<input type="checkbox"/> List S/Ns which comply already:	
<input type="checkbox"/> List S/Ns to be reworked or scrapped:	
<input type="checkbox"/> List S/Ns to be built with this change:	
<input type="checkbox"/> List S/Ns to be retested per this change:	

**SAFETY, COST, SCHEDULE, REQUIREMENTS IMPACT?**  YES  NO  
 If yes, CCB approval is required. Enter change request number:

APPROVALS	DATE	OTHER APPROVALS (specify):	DATE
<b>ORIGINATOR:</b> M. Amato	2/08/02		
<b>ORG. MANAGER:</b>			
D. Thompson			
G. Shiblee			
T. Johnson			

**DCC RELEASE:** Doc. Control Level:  Subsystem  LAT IPO  GLAST Project



## DOCUMENT CHANGE NOTICE

### Continuation:

.Detailed list of changes to LAT-SS-00016-(D11-D13)  
(changes from draft 11 to draft 12)

- Updated Figure 2-1 LAT Specification Tree with latest one which first appeared in December release of LAT level IIb reqs/specs
- Added ACD to acronyms, added ACD signature page
- Updated some of the Applicable Documents (numbers, titles etc.)
- Removed text version of requirements which were in Section 5. All of this text now resides in requirements table. Kept the old section numbers as the requirements numbers in the table to ease transition.
- Added column to requirements table which attempts to list the next higher level (LAT IIb in this case) requirement(s) from which the requirement came from.
- Req 5.3 - replaced TBD with .99 and note requesting further simulation confirmation
- Req 5.6 - replaced micrometeorite with micrometeoroid
- Req 5.9 - added note for reason why (CAL energy res) and referral to level 4 req 5.8.7
- Req 5.10 – replaced 30 MIP with 64 MIP
- Req 5.11.2 – replaced 600 nsec with 700 nsec and replaced <200 nsec with ' including jitter'
- Req 5.11.7 – replaced 1000 MIPs with 200 MIPs
- Req 5.12.1 and 5.12.2 – added pC units in parenthesis
- Req 5.12.3 – replaced 1000 MIP with 200 MIP
- Req 5.12.5 – replaced 22 microseconds to 18.5 microseconds
- Req 5.12.6 – added this generic housekeeping req
- Req 5.13 – Combined req 5.13 and req 5.15, added note to double check 1% and 5% numbers, added .96 rel over 5 years.
- Req 5.15 – replace old 5.15 which was combined with 5.13 with this general testability req
- Req 5.18 – replace 37 W with 31 W conditioned
- Req 5.19 – added note that ACD has requested a change to mass limit
- Req 5.20 – added note to clarify 393mm vs 400mm discrepancy and added a note mentioning what ACD stated as assumption at PDR for X and Y dimensions (+/- 5mm) which are not currently in mechanical ICD.
- Req 5.21 – added some env. tests which are required
- Req 5.21, 5.22 and 5.23.3 – added ICD document numbers
- Other – modified a few general verification methods listed in third column

Changes from draft 12 to draft 13

- Req 5.3 – changed 0.6 MIP to 2 MIP, this includes ranges added to account for degradation
- General - Replaced ACD TEM with AEM in a variety of places.
- Req 5.11.2 – replaced 50 -700 nsec including jitter to commandable from 200 -1600 nsec from particle passage.
- Req 5.11.5 – Changed 'trigger' to 'state' and changed +/- 300nsec to +/- 250 nsec
- Req 5.11.6 – this req has been completely changed.
- Req 5.11.7 – changed 'Fast' to Logic in title. Added note about current design exceeding old req.
- Req 5.11.8 – Deleted 'delivered to', deleted last sentence. Added 'with timing char. As stated in 5.11.2 and 5.11.6.
- Req 5.12 – Added current thermal information is one single thermistor per board, we are considering more thermistors on structure.
- Req 5.12.5 – removed 'transmitted' and added note – 18.5 does not include transmission.
- Req 5.17.3 – Replaced 'redundant set of electronics' with 'each electronics board'
- Req 5.25 – replaced last sentence with 'Accomplished by HVBS command from AEM to GARC'