COVER SHEET

Program: GLAST

Procedure Number: LAT-TD-03415

Procedure Title: TEM Performance Test Procedure

Paragraph Number: 5.4

Paragraph Title: Performance Tests

Unit S/N: C12

TEST READINESS REVIEW COMPLETED AND APPROVED BY THE FOLLOWING:

Test Director: [signature] Date: 12/14/04

Quality Assurance: [signature] LAT 10 QA Date: 12/14/04

Test Conductor: [signature] Date: 12/14/04

REVIEWED AND APPROVED BY THE FOLLOWING:

Test Director: [signature] Date: 12/15/04

Quality Assurance: [signature] LAT 10 QA Date: 12/15/04

Test Conductor: [signature] Date: 12/15/04

TEST DATA SHEET	Unit S/N: G12	Date/Temperature: 12/15/04/[illegible]
Title: 5.1.3 Test Equipment	Operator: L.S	QA: LAT 10 QA

Para./ Step	Test Equipment Description, ·Manufacturer	Model/LAT Number	*Cal./Val. Date
5.1.3.1 - 1	**Record Model/LAT number, Serial/Revision number, Calibration due dates and Validation date for all equipment used in this procedure:**		
	VME Crate, Dawn VME Products	11-1011777-2119 VME64x (series 767)	GLAT1132
	VME, TST-STP Trans card	LAT-DS-00999	GLAT0216
	VME SBC MVME2304 card, Motorola	PN MVME2304-0123	GLAT0305
	VME LCB Mezzanine card	LAT-TD-00860	GLAT0822
	Software for the local PC	LATTE P04-04-01 www-glast.slac.stanford.edu/IntegrationTest/ONLINE/updates/	OK
	Software for the local PC	TEMPROD V00-00-00	OK
	DC Power supply #1, BK Precision	1697	GLAT1485 8/5
	DC Power supply #2, BK Precision	1697	GLAT1336 8/5
	28 Volt supply cable	LAT-DS-03246	N/A
	PS Control cable	LAT-DS-04831	GLAT1420
	TEM to GASU cable	LAT-DS-02106	GLAT1471
	LCB Transition board cable	LAT-DS-03247	GLAT1314
	TEM Test Board Assembly	LAT-DS-04465	GLAT0477
	TEM Test board cooling fan assembly	LAT-DS-03567	GLAT0022
	CAT5 Ethernet cable	TRD855PL-50	N/A
	RS-232 Cable	TDC003-7 (RECO98M connectors)	N/A
	Ground jumper, Banana, Pomona	B-12-0	N/A
	PS extension cable	LAT-DS-04629	GLAT1397
	Digital Multimeter, Fluke/Meterman	87-III/38XR	SCAC00004 11/5

* This column is used to enter the date that equipment is validated, when validated equipment is recorded in this data sheet.

TEST DATA SHEET	Unit S/N: E12	Date/Temperature: 12/15/04 / ambient
Title: 5.1.4 Participant List	Operator: L.S	QA: LAT 10 QA

Para./ Step	Title	Print Name	Signature
5.1.4 - 1	**Record names of all personnel that take part in the test/operation:**		
	elect. eng	L. Sapozhnikova	
	~~PA~~ QE	PAT LOOM	Pat Lyon

TEST DATA SHEET	Unit S/N: 612	Date: 12/15/09
Title: 5.3 Pre Operation Verifications	Operator: C.S	QA: LAT 10 QA

Step	Description	Requirement	Units	Data
5.3	**Pre-Operation Verifications**			
-1	Notify QAE.	OK	OK/NG	OK
-2	Test Readiness Review is done.	OK	OK/NG	OK
-3	Record the EUT equipment:			
	TEM Part number	NA	NA	LAT-DS-04648-SE
	TEM LAT Bay location	NA	NA	N/A
	TEM Serial number	NA	NA	612
	TPS Part number	NA	NA	6LAT0386
	TPS LAT Bay location	NA	NA	N/A
	TPS Serial number	NA	NA	N/A
-4	Power on the LAT or EGSE is off.	OFF	ON/OFF	OFF
-5	Set DMM to autoranging for resistance.	OK	OK/NG	OK
-6	Measure DMM lead resistance.	< 2.0	Ω	0.2
-7	Measure EUT to ground.	< 2.0	Ω	0.5
-8	Measure equipment to ground.	< 2.0	Ω	0.6
-9	All connector savers are installed on the flight connections.	OK	OK/NG	OK
-10	The test equipment and participant lists have been completed.	OK	OK/NG	OK

TEST DATA SHEET	Unit S/N: 612	Date/Temperature: 12/15/04
Paragraph: 5.4 Performance Tests	Operator: C.S	QA: LAT TO QA

Step	Description	Requirement	Units	Data
5.4.2	Monitor Margin and Bias Test Procedure			
-11	Verify all tests passed by green indicators and no errors in the Messages box on the Margin and Bias Test window.	OK	OK/NG	OK*
-12	Attach printout of the Monitor Margin and Bias Test log file to this data package.	OK	OK/NG	OK
5.4.3	Temperature Monitor Test			
-11	Verify the test passed by green indicator and no errors in the Messages box on the Temperature Tests window.	OK	OK/NG	OK
-12	Attach printout of the Temperature Monitor Test log file to this data package.	OK	OK/NG	OK
5.4.4	Basic Test			
-8	Verify all tests passed by green indicators and "0" for Communication Errors and Event Errors on the Main Panel tab.	OK	OK/NG	OK
-9	Attach printout of the Basic Test log file to this data package.	OK	OK/NG	OK
5.4.5	Front End Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the Main Panel tab.	OK	OK/NG	OK
-9	Attach printout of the Front End Test log file to this data package.	OK	OK/NG	OK
5.4.6	TEM FIFO Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the FIFO Test window.	OK	OK/NG	OK
-9	Attach printout of the FIFO Test log file to this data package.	OK	OK/NG	OK

Midrange 0.001 - 0.005 A
High Range 0.002 - 0.005 A
Range for TRK Bias current is

TEST DATA SHEET		Unit S/N:		Date/Temperature:	
Paragraph: 5.4.7.1 Multiple Frequency Test at +55° C		Operator:		QA:	
Step	Description		Requirement	Units	Data
5.4.2	Monitor Margin and Bias Test				
-11	Verify test passed by green indicator and no errors in the Messages box on the Margin and Bias Test window.		OK	OK/NG	
-12	Attach printout of the Monitor Margin and Bias Test log file to this data package.		OK	OK/NG	

N/A

TEST DATA SHEET			Unit S/N:		Date/Temperature:	
Paragraph: 5.4.7.1 Multiple Frequency Test at +55° C (23 MHz)			Operator:		QA:	
Step	Description		Requirement	Units	Data	
5.4.4	Basic Test					
-8	Verify all tests passed by green indicators and "0" for Communication Errors and Event Errors on the Main Panel tab.		OK	OK/NG		
-9	Attach printout of the Basic Test log file to this data package.		OK	OK/NG		
5.4.5	Front End Test					
-8	Verify all tests passed by green indicators and "0" for Total Errors on the Main Panel tab.		OK	OK/NG		
-9	Attach printout of the Front End Test log file to this data package.		OK	OK/NG		
5.4.6	FIFO Test					
-8	Verify all tests passed by green indicators and "0" for Total Errors on the FIFO Test window.		OK	OK/NG		
-9	Attach printout of the FIFO Test log file to this data package.		OK	OK/NG		

N/A

TEST DATA SHEET	Unit S/N:	Date/Temperature:
Paragraph: 5.4.7.1 Multiple Frequency Test at +55° C (14 MHz)	Operator:	QA:

Step	Description	Requirement	Units	Data
5.4.4	Basic Test			
-8	Verify all tests passed by green indicators and "0" for Communication Errors and Event Errors on the Main Panel tab.	OK	OK/NG	
-9	Attach printout of the Basic Test log file to this data package.	OK	OK/NG	
5.4.5	Front End Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the Main Panel tab.	OK	OK/NG	
-9	Attach printout of the Front End Test log file to this data package.	OK	OK/NG	
5.4.6	FIFO Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the FIFO Test window.	OK	OK/NG	
-9	Attach printout of the FIFO Test log file to this data package.	OK	OK/NG	

N/A

TEST DATA SHEET		Unit S/N:		Date/Temperature:	
Paragraph: 5.4.7.1 Multiple Frequency Test at +55° C (20 MHz)		Operator:		QA:	
Step	Description	Requirement	Units	Data	
5.4.4	Basic Test				
-8	Verify all tests passed by green indicators and "0" for Communication Errors and Event Errors on the Main Panel tab.	OK	OK/NG		
-9	Attach printout of the Basic Test log file to this data package.	OK	OK/NG		
5.4.5	Front End Test				
-8	Verify all tests passed by green indicators and "0" for Total Errors on the Main Panel tab.	OK	OK/NG		
-9	Attach printout of the Front End Test log file to this data package.	OK	OK/NG		
5.4.6	FIFO Test				
-8	Verify all tests passed by green indicators and "0" for Total Errors on the FIFO Test window.	OK	OK/NG		
-9	Attach printout of the FIFO Test log file to this data package.	OK	OK/NG		

N/A

TEST DATA SHEET	Unit S/N:	Date/Temperature:
Paragraph: 5.4.7.2 Multiple Frequency Test at -40° C	Operator:	QA:

Step	Description	Requirement	Units	Data
5.4.2	Monitor Margin and Bias Test			
-11	Verify test passed by green indicator and no errors in the Messages box on the Margin and Bias Test window.	OK	OK/NG	
-12	Attach printout of the Monitor Margin and Bias Test log file to this data package.	OK	OK/NG	

N/A

TEST DATA SHEET		Unit S/N:		Date/Temperature:
Paragraph: 5.4.7.2 Multiple Frequency Test at - 40° C (23 MHz)		Operator:		QA:
Step	Description	Requirement	Units	Data
5.4.4	Basic Test			
-8	Verify all tests passed by green indicators and "0" for Communication Errors and Event Errors on the Main Panel tab.	OK	OK/NG	
-9	Attach printout of the Basic Test log file to this data package.	OK	OK/NG	
5.4.5	Front End Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the Main Panel tab.	OK	OK/NG	
-9	Attach printout of the Front End Test log file to this data package.	OK	OK/NG	
5.4.6	FIFO Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the FIFO Test window.	OK	OK/NG	
-9	Attach printout of the FIFO Test log file to this data package.	OK	OK/NG	

N/A

TEST DATA SHEET		Unit S/N:		Date/Temperature:
Paragraph: 5.4.7.2 Multiple Frequency Test at -40° C (14 MHz)		Operator:		QA:
Step	Description	Requirement	Units	Data
5.4.4	Basic Test			
-8	Verify all tests passed by green indicators and "0" for Communication Errors and Event Errors on the Main Panel tab.	OK	OK/NG	
-9	Attach printout of the Basic Test log file to this data package.	OK	OK/NG	
5.4.5	Front End Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the Main Panel tab.	OK	OK/NG	
-9	Attach printout of the Front End Test log file to this data package.	OK	OK/NG	
5.4.6	FIFO Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the FIFO Test window.	OK	OK/NG	
-9	Attach printout of the FIFO Test log file to this data package.	OK	OK/NG	

N/A

TEST DATA SHEET		Unit S/N:		Date/Temperature:
Paragraph: 5.4.7.2 Multiple Frequency Test at -40° C (20 MHz)		Operator:		QA:
Step	Description	Requirement	Units	Data
5.4.4	Basic Test			
-8	Verify all tests passed by green indicators and "0" for Communication Errors and Event Errors on the Main Panel tab.	OK	OK/NG	
-9	Attach printout of the Basic Test log file to this data package.	OK	OK/NG	
5.4.5	Front End Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the Main Panel tab.	OK	OK/NG	
-9	Attach printout of the Front End Test log file to this data package.	OK	OK/NG	
5.4.6	FIFO Test			
-8	Verify all tests passed by green indicators and "0" for Total Errors on the FIFO Test window.	OK	OK/NG	
-9	Attach printout of the FIFO Test log file to this data package.	OK	OK/NG	

N/A

TEST DATA SHEET	Unit S/N: 612	Date/Temperature: 12/15/04 / ambient
Paragraph: 5.4.8 Functional Test Procedure	Operator: L.S	QA:

Step	Description	Requirement	Units	Data
5.4.8	Functional Test			
-8	Verify all tests passed by green indicators and no errors in the Messages box on the Functional Test window.	OK	OK/NG	OK
-9	Attach printout of the Functional Test log file to this data package.	OK	OK/NG	OK

```
11:00:57  no input file used for cal in this mode; use default slope 1.000000 and
intercept 0.000000
11:00:57  no input file used for tkr in this mode; use default slope 1.000000 and
intercept 0.000000
11:00:57  reading input file
V:\GLAST\Electronics\TEMPROD\TpsCalibTest\data\tps_0386_612_20041215_105942.csv
11:00:57  using slope 65.658863 and intercept -0.122454
11:01:02

--- Testing Low Range ---

11:01:02  Pdu TEM voltage 0: Raw  2351   Calibrated  2.870 V:   tolerance 2.7-3.0 V
    result: ok
11:01:02  Pdu TEM voltage 1: Raw  2352   Calibrated  2.871 V:   tolerance 2.7-3.0 V
    result: ok
11:01:02  TEM              : Raw  2352   Calibrated  2.871 V:   tolerance 2.7-3.0 V
    result: ok
11:01:02  Cal Digital       : Raw  2318   Calibrated  2.830 V:   tolerance 2.7-3.0 V
    result: ok
11:01:02  Cal Analog        : Raw  2360   Calibrated  2.881 V:   tolerance 2.7-3.0 V
    result: ok
11:01:02  Tkr Digital       : Raw  2254   Calibrated  2.064 V:   tolerance 2.0-2.2 V
      result: ok
11:01:02  Tkr Analog A      : Raw  1426   Calibrated  1.093 V:   tolerance 1.0-1.35 V
       result: ok
11:01:02  Tkr Analog B      : Raw  2295   Calibrated  2.101 V:   tolerance 1.9-2.3 V
    result: ok
11:01:02  Cal Bias  1       : Raw   418   Calibrated  25.83 V:   tolerance 24.0-27.0
V      result: ok
11:01:02  Cal Bias  0       : Raw    18   Calibrated  1.111 V:   tolerance 0.0-1.999
V      result: ok
11:01:02  Cal Bias Current :              Calibrated  0.004847 A: tolerance
0.004-0.006 A  result: ok
11:01:02  Tkr Bias  1       : Raw   418   Calibrated  25.82 V:   tolerance 24.0-27.0
V      result: ok
11:01:02  Tkr Bias  0       : Raw    17   Calibrated  1.048 V:   tolerance 0.0-2.0 V
    result: ok
11:01:02  Tkr Bias Current :              Calibrated  0.004858 A: tolerance
0.004-0.006 A    result: ok
11:01:02  Tower 28V V1      : Raw  3396   Calibrated  27.41 V:   tolerance 26.0-28.0
V      result: ok
11:01:02  Tower 28V V2      : Raw  3417   Calibrated  27.58 V:   tolerance 26.0-28.0
V      result: ok
11:01:02  Current Calculation: I=65.659*(2.5/4095)*(V2-V1)+-0.122
11:01:02  Tower Current    :              Calibrated  0.73876 A: tolerance 0.6-0.9 A
result: ok
11:01:06

--- Testing High Range ---

11:01:06  Pdu TEM voltage 0: Raw  2919   Calibrated  3.564 V:   tolerance 3.5-3.7 V
    result: ok
11:01:06  Pdu TEM voltage 1: Raw  2913   Calibrated  3.556 V:   tolerance 3.5-3.7 V
    result: ok
11:01:06  TEM              : Raw  2908   Calibrated  3.550 V:   tolerance 3.5-3.7 V
    result: ok
11:01:06  Cal Digital       : Raw  3030   Calibrated  3.699 V:   tolerance 3.6-4.0 V
    result: ok
11:01:06  Cal Analog        : Raw  3083   Calibrated  3.764 V:   tolerance 3.6-4.0 V
    result: ok
11:01:06  Tkr Digital       : Raw  3202   Calibrated  2.932 V:   tolerance 2.9-3.1 V
      result: ok
11:01:06  Tkr Analog A      : Raw  2117   Calibrated  1.622 V:   tolerance 1.6-1.8 V
```

```
      result: ok
11:01:06  Tkr Analog B     : Raw  3256   Calibrated  2.981 V:   tolerance 2.85-3.1 V
     result: ok
11:01:06  Cal Bias  1      : Raw  1672   Calibrated  103.1 V:   tolerance 80.0-110.0
V      result: ok
11:01:06  Cal Bias  0      : Raw  1545   Calibrated  95.30 V:   tolerance 70.0-100.0
V      result: ok
11:01:06  Cal Bias Current :             Calibrated  0.001529 A: tolerance
0.001-0.002 A  result: ok
11:01:06  Tkr Bias  1      : Raw  2570   Calibrated  158.5 V:   tolerance
145.0-165.0 V      result: ok
11:01:06  Tkr Bias  0      : Raw  2232   Calibrated  137.6 V:   tolerance
130.0-150.0 V      result: ok
11:01:06  Tkr Bias Current is 0.004092 for High test: out of tolerance range
0.003000-0.004000
11:01:06  Tkr Bias Current :             Calibrated  0.004091 A: tolerance
0.003-0.004 A    result: high
11:01:06  Tower 28V V1     : Raw  3343   Calibrated  26.98 V:   tolerance 26.0-28.0
V      result: ok
11:01:06  Tower 28V V2     : Raw  3379   Calibrated  27.27 V:   tolerance 26.0-28.0
V      result: ok
11:01:06  Current Calculation: I=65.659*(2.5/4095)*(V2-V1)+-0.122
11:01:06  Tower Current    :             Calibrated  1.32921 A: tolerance 1.1-1.5 A
result: ok
11:01:11

--- Testing MidRange Range ---

11:01:11  Pdu TEM voltage 0: Raw  2726   Calibrated  3.328 V:   tolerance 3.25-3.45
V      result: ok
11:01:11  Pdu TEM voltage 1: Raw  2729   Calibrated  3.332 V:   tolerance 3.25-3.45
V      result: ok
11:01:11  TEM              : Raw  2722   Calibrated  3.323 V:   tolerance 3.25-3.45
V      result: ok
11:01:11  Cal Digital      : Raw  2679   Calibrated  3.271 V:   tolerance 3.25-3.45
V      result: ok
11:01:11  Cal Analog       : Raw  2726   Calibrated  3.328 V:   tolerance 3.25-3.45
V      result: ok
11:01:11  Tkr Digital      : Raw  2733   Calibrated  2.502 V:   tolerance 2.5-2.7 V
      result: ok
11:01:11  Tkr Analog A     : Raw  1772   Calibrated  1.358 V:   tolerance 1.3-1.6 V
      result: ok
11:01:11  Tkr Analog B     : Raw  2783   Calibrated  2.548 V:   tolerance 2.35-2.73
V      result: ok
11:01:11  Cal Bias  1      : Raw   876   Calibrated  54.02 V:   tolerance 45.0-55.0
V      result: ok
11:01:11  Cal Bias  0      : Raw   820   Calibrated  50.56 V:   tolerance 40.0-55.0
V      result: ok
11:01:11  Cal Bias Current :             Calibrated  0.000679 A: tolerance
0.0005-0.001 A  result: ok
11:01:11  Tkr Bias  1      : Raw  1289   Calibrated  79.51 V:   tolerance 70.0-85.0
V      result: ok
11:01:11  Tkr Bias  0      : Raw  1120   Calibrated  69.11 V:   tolerance 60.0-75.0
V      result: ok
11:01:11  Tkr Bias Current is 0.002040 for MidRange test: out of tolerance range
0.001000-0.002000
11:01:11  Tkr Bias Current :             Calibrated  0.002040 A: tolerance
0.001-0.002 A    result: high
11:01:11  Tower 28V V1     : Raw  3372   Calibrated  27.21 V:   tolerance 26.0-28.0
V      result: ok
11:01:11  Tower 28V V2     : Raw  3400   Calibrated  27.44 V:   tolerance 26.0-28.0
V      result: ok
11:01:11  Current Calculation: I=65.659*(2.5/4095)*(V2-V1)+-0.122
```

bias_0386_612_20041215_110057

11:01:11 Tower Current : Calibrated 0.99651 A: tolerance 0.9-1.3 A result: ok

```
11:02:56  Cal 0 T0: Raw  3157   Calibrated  27.5 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Cal 0 T1: Raw  3174   Calibrated  28.2 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Cal 1 T0: Raw  3144   Calibrated  27.0 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Cal 1 T1: Raw  3168   Calibrated  28.0 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Cal 2 T0: Raw  3139   Calibrated  26.8 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Cal 2 T1: Raw  3160   Calibrated  27.6 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Cal 3 T0: Raw  3145   Calibrated  27.1 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Cal 3 T1: Raw  3190   Calibrated  28.8 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 0 T0: Raw  3178   Calibrated  28.4 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 0 T1: Raw  3161   Calibrated  27.7 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 1 T0: Raw  3152   Calibrated  27.3 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 1 T1: Raw  3185   Calibrated  28.6 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 2 T0: Raw  3183   Calibrated  28.6 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 2 T1: Raw  3230   Calibrated  30.5 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 3 T0: Raw  3144   Calibrated  27.0 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 3 T1: Raw  3173   Calibrated  28.2 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 4 T0: Raw  3142   Calibrated  26.9 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 4 T1: Raw  3187   Calibrated  28.7 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 5 T0: Raw  3131   Calibrated  26.5 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 5 T1: Raw  3156   Calibrated  27.5 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 6 T0: Raw  3172   Calibrated  28.1 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 6 T1: Raw  3138   Calibrated  26.8 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 7 T0: Raw  3156   Calibrated  27.5 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tkr 7 T1: Raw  3195   Calibrated  29.0 C  tolerance range 20.0-35.0C
result: ok
11:02:56  PS T0   : Raw  3125   Calibrated  26.3 C  tolerance range 20.0-35.0C
result: ok
11:02:56  PS T1   : Raw  3106   Calibrated  25.6 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tem T0  : Raw  3123   Calibrated  26.2 C  tolerance range 20.0-35.0C
result: ok
11:02:56  Tem T1  : Raw  3116   Calibrated  26.0 C  tolerance range 20.0-35.0C
result: ok
```

basic_20041215_110312

12/15/04 11:03:55 INFO Test Over: All tests Successful

```
12/15/04 11:04:15 INFO  GTCC 0 - Analog A          Ref: 1.360 V    Actual: 1.284 V
12/15/04 11:04:15 INFO  GTCC 0 - Analog B          Ref: 2.553 V    Actual: 2.539 V
12/15/04 11:04:15 INFO  GTCC 0 - Digital           Ref: 2.506 V    Actual: 2.439 V
12/15/04 11:04:15 INFO  GTCC 0 - High Voltage      Ref: 136.5 V    Actual: 135.7 V
12/15/04 11:04:15 INFO  GTCC 0 - High Voltage by 2                 Actual: 50.31 V

12/15/04 11:04:15 INFO  GTCC 1 - Analog A          Ref: 1.360 V    Actual: 1.294 V
12/15/04 11:04:15 INFO  GTCC 1 - Analog B          Ref: 2.553 V    Actual: 2.544 V
12/15/04 11:04:15 INFO  GTCC 1 - Digital           Ref: 2.506 V    Actual: 2.451 V
12/15/04 11:04:15 INFO  GTCC 1 - High Voltage      Ref: 136.5 V    Actual: 135.4 V
12/15/04 11:04:15 INFO  GTCC 1 - High Voltage by 2                 Actual: 48.83 V

12/15/04 11:04:15 INFO  GTCC 2 - Analog A          Ref: 1.360 V    Actual: 1.293 V
12/15/04 11:04:15 INFO  GTCC 2 - Analog B          Ref: 2.553 V    Actual: 2.539 V
12/15/04 11:04:15 INFO  GTCC 2 - Digital           Ref: 2.506 V    Actual: 2.446 V
12/15/04 11:04:15 INFO  GTCC 2 - High Voltage      Ref: 136.5 V    Actual: 135.7 V
12/15/04 11:04:15 INFO  GTCC 2 - High Voltage by 2                 Actual: 49.82 V

12/15/04 11:04:15 INFO  GTCC 3 - Analog A          Ref: 1.360 V    Actual: 1.308 V
12/15/04 11:04:15 INFO  GTCC 3 - Analog B          Ref: 2.553 V    Actual: 2.542 V
12/15/04 11:04:15 INFO  GTCC 3 - Digital           Ref: 2.506 V    Actual: 2.456 V
12/15/04 11:04:15 INFO  GTCC 3 - High Voltage      Ref: 136.5 V    Actual: 135.6 V
12/15/04 11:04:15 INFO  GTCC 3 - High Voltage by 2                 Actual: 53.08 V

12/15/04 11:04:15 INFO  GTCC 4 - Analog A          Ref: 1.360 V    Actual: 1.316 V
12/15/04 11:04:15 INFO  GTCC 4 - Analog B          Ref: 2.553 V    Actual: 2.544 V
12/15/04 11:04:15 INFO  GTCC 4 - Digital           Ref: 2.506 V    Actual: 2.481 V
12/15/04 11:04:15 INFO  GTCC 4 - High Voltage      Ref: 136.5 V    Actual: 135.5 V
12/15/04 11:04:15 INFO  GTCC 4 - High Voltage by 2                 Actual: 51.30 V

12/15/04 11:04:15 INFO  GTCC 5 - Analog A          Ref: 1.360 V    Actual: 1.324 V
12/15/04 11:04:15 INFO  GTCC 5 - Analog B          Ref: 2.553 V    Actual: 2.554 V
12/15/04 11:04:15 INFO  GTCC 5 - Digital           Ref: 2.506 V    Actual: 2.483 V
12/15/04 11:04:15 INFO  GTCC 5 - High Voltage      Ref: 136.5 V    Actual: 135.2 V
12/15/04 11:04:15 INFO  GTCC 5 - High Voltage by 2                 Actual: 48.77 V

12/15/04 11:04:15 INFO  GTCC 6 - Analog A          Ref: 1.360 V    Actual: 1.326 V
12/15/04 11:04:15 INFO  GTCC 6 - Analog B          Ref: 2.553 V    Actual: 2.555 V
12/15/04 11:04:15 INFO  GTCC 6 - Digital           Ref: 2.506 V    Actual: 2.481 V
12/15/04 11:04:15 INFO  GTCC 6 - High Voltage      Ref: 136.5 V    Actual: 137.8 V
12/15/04 11:04:15 INFO  GTCC 6 - High Voltage by 2                 Actual: 48.58 V

12/15/04 11:04:15 INFO  GTCC 7 - Analog A          Ref: 1.360 V    Actual: 1.319 V
12/15/04 11:04:15 INFO  GTCC 7 - Analog B          Ref: 2.553 V    Actual: 2.554 V
12/15/04 11:04:15 INFO  GTCC 7 - Digital           Ref: 2.506 V    Actual: 2.481 V
12/15/04 11:04:15 INFO  GTCC 7 - High Voltage      Ref: 136.5 V    Actual: 134.6 V
12/15/04 11:04:15 INFO  GTCC 7 - High Voltage by 2                 Actual: 49.14 V

12/15/04 11:04:21 INFO  GCCC 0 - Analog            Ref: 3.335 V    Actual: 3.194 V
12/15/04 11:04:21 INFO  GCCC 0 - Digital           Ref: 3.278 V    Actual: 3.091 V
12/15/04 11:04:21 INFO  GCCC 0 - High Voltage      Ref: 39.27 V    Actual: 40.57 V

12/15/04 11:04:21 INFO  GCCC 1 - Analog            Ref: 3.335 V    Actual: 3.216 V
12/15/04 11:04:21 INFO  GCCC 1 - Digital           Ref: 3.278 V    Actual: 3.145 V
12/15/04 11:04:21 INFO  GCCC 1 - High Voltage      Ref: 39.27 V    Actual: 40.51 V

12/15/04 11:04:21 INFO  GCCC 2 - Analog            Ref: 3.335 V    Actual: 3.196 V
12/15/04 11:04:21 INFO  GCCC 2 - Digital           Ref: 3.278 V    Actual: 3.140 V
12/15/04 11:04:21 INFO  GCCC 2 - High Voltage      Ref: 39.27 V    Actual: 40.26 V

12/15/04 11:04:21 INFO  GCCC 3 - Analog            Ref: 3.335 V    Actual: 3.194 V
12/15/04 11:04:21 INFO  GCCC 3 - Digital           Ref: 3.278 V    Actual: 3.174 V
12/15/04 11:04:21 INFO  GCCC 3 - High Voltage      Ref: 39.27 V    Actual: 40.44 V
```

```
12/15/04 11:04:29 INFO  GTCC 0 - Analog A          Ref: 1.358 V    Actual: 1.280 V
12/15/04 11:04:29 INFO  GTCC 0 - Analog B          Ref: 2.549 V    Actual: 2.536 V
12/15/04 11:04:30 INFO  GTCC 0 - Digital           Ref: 2.503 V    Actual: 2.437 V
12/15/04 11:04:30 INFO  GTCC 0 - High Voltage      Ref: 137.9 V    Actual: 137.1 V
12/15/04 11:04:30 INFO  GTCC 0 - High Voltage by 2                 Actual: 50.74 V

12/15/04 11:04:30 INFO  GTCC 1 - Analog A          Ref: 1.358 V    Actual: 1.290 V
12/15/04 11:04:30 INFO  GTCC 1 - Analog B          Ref: 2.549 V    Actual: 2.542 V
12/15/04 11:04:30 INFO  GTCC 1 - Digital           Ref: 2.503 V    Actual: 2.449 V
12/15/04 11:04:30 INFO  GTCC 1 - High Voltage      Ref: 137.9 V    Actual: 136.8 V
12/15/04 11:04:30 INFO  GTCC 1 - High Voltage by 2                 Actual: 49.32 V

12/15/04 11:04:30 INFO  GTCC 2 - Analog A          Ref: 1.358 V    Actual: 1.290 V
12/15/04 11:04:30 INFO  GTCC 2 - Analog B          Ref: 2.549 V    Actual: 2.536 V
12/15/04 11:04:30 INFO  GTCC 2 - Digital           Ref: 2.503 V    Actual: 2.443 V
12/15/04 11:04:30 INFO  GTCC 2 - High Voltage      Ref: 137.9 V    Actual: 137.1 V
12/15/04 11:04:30 INFO  GTCC 2 - High Voltage by 2                 Actual: 50.19 V

12/15/04 11:04:30 INFO  GTCC 3 - Analog A          Ref: 1.358 V    Actual: 1.306 V
12/15/04 11:04:30 INFO  GTCC 3 - Analog B          Ref: 2.549 V    Actual: 2.539 V
12/15/04 11:04:30 INFO  GTCC 3 - Digital           Ref: 2.503 V    Actual: 2.454 V
12/15/04 11:04:30 INFO  GTCC 3 - High Voltage      Ref: 137.9 V    Actual: 137.1 V
12/15/04 11:04:30 INFO  GTCC 3 - High Voltage by 2                 Actual: 53.76 V

12/15/04 11:04:30 INFO  GTCC 4 - Analog A          Ref: 1.358 V    Actual: 1.312 V
12/15/04 11:04:30 INFO  GTCC 4 - Analog B          Ref: 2.549 V    Actual: 2.543 V
12/15/04 11:04:30 INFO  GTCC 4 - Digital           Ref: 2.503 V    Actual: 2.477 V
12/15/04 11:04:30 INFO  GTCC 4 - High Voltage      Ref: 137.9 V    Actual: 136.9 V
12/15/04 11:04:30 INFO  GTCC 4 - High Voltage by 2                 Actual: 51.79 V

12/15/04 11:04:30 INFO  GTCC 5 - Analog A          Ref: 1.358 V    Actual: 1.323 V
12/15/04 11:04:30 INFO  GTCC 5 - Analog B          Ref: 2.549 V    Actual: 2.551 V
12/15/04 11:04:30 INFO  GTCC 5 - Digital           Ref: 2.503 V    Actual: 2.481 V
12/15/04 11:04:30 INFO  GTCC 5 - High Voltage      Ref: 137.9 V    Actual: 136.7 V
12/15/04 11:04:30 INFO  GTCC 5 - High Voltage by 2                 Actual: 49.26 V

12/15/04 11:04:30 INFO  GTCC 6 - Analog A          Ref: 1.358 V    Actual: 1.323 V
12/15/04 11:04:30 INFO  GTCC 6 - Analog B          Ref: 2.549 V    Actual: 2.554 V
12/15/04 11:04:30 INFO  GTCC 6 - Digital           Ref: 2.503 V    Actual: 2.477 V
12/15/04 11:04:30 INFO  GTCC 6 - High Voltage      Ref: 137.9 V    Actual: 139.3 V
12/15/04 11:04:30 INFO  GTCC 6 - High Voltage by 2                 Actual: 49.02 V

12/15/04 11:04:30 INFO  GTCC 7 - Analog A          Ref: 1.358 V    Actual: 1.318 V
12/15/04 11:04:30 INFO  GTCC 7 - Analog B          Ref: 2.549 V    Actual: 2.551 V
12/15/04 11:04:30 INFO  GTCC 7 - Digital           Ref: 2.503 V    Actual: 2.478 V
12/15/04 11:04:30 INFO  GTCC 7 - High Voltage      Ref: 137.9 V    Actual: 136.1 V
12/15/04 11:04:30 INFO  GTCC 7 - High Voltage by 2                 Actual: 49.69 V

12/15/04 11:04:35 INFO  GCCC 0 - Analog            Ref: 3.330 V    Actual: 3.194 V
12/15/04 11:04:35 INFO  GCCC 0 - Digital           Ref: 3.274 V    Actual: 3.091 V
12/15/04 11:04:35 INFO  GCCC 0 - High Voltage      Ref: 95.69 V    Actual: 98.16 V

12/15/04 11:04:35 INFO  GCCC 1 - Analog            Ref: 3.330 V    Actual: 3.213 V
12/15/04 11:04:35 INFO  GCCC 1 - Digital           Ref: 3.274 V    Actual: 3.145 V
12/15/04 11:04:35 INFO  GCCC 1 - High Voltage      Ref: 95.69 V    Actual: 97.17 V

12/15/04 11:04:35 INFO  GCCC 2 - Analog            Ref: 3.330 V    Actual: 3.194 V
12/15/04 11:04:35 INFO  GCCC 2 - Digital           Ref: 3.274 V    Actual: 3.137 V
12/15/04 11:04:35 INFO  GCCC 2 - High Voltage      Ref: 95.69 V    Actual: 95.94 V

12/15/04 11:04:35 INFO  GCCC 3 - Analog            Ref: 3.330 V    Actual: 3.189 V
12/15/04 11:04:35 INFO  GCCC 3 - Digital           Ref: 3.274 V    Actual: 3.174 V
```

```
12/15/04 11:04:35 INFO  GCCC 3 - High Voltage     Ref: 95.69 V    Actual: 95.32 V

12/15/04 11:04:44 INFO  GTCC 0 - Analog A         Ref: 1.357 V    Actual: 1.280 V
12/15/04 11:04:44 INFO  GTCC 0 - Analog B         Ref: 2.549 V    Actual: 2.536 V
12/15/04 11:04:44 INFO  GTCC 0 - Digital          Ref: 2.502 V    Actual: 2.437 V
12/15/04 11:04:44 INFO  GTCC 0 - High Voltage     Ref: 137.9 V    Actual: 137.1 V
12/15/04 11:04:44 INFO  GTCC 0 - High Voltage by 2                Actual: 50.80 V

12/15/04 11:04:44 INFO  GTCC 1 - Analog A         Ref: 1.357 V    Actual: 1.290 V
12/15/04 11:04:44 INFO  GTCC 1 - Analog B         Ref: 2.549 V    Actual: 2.542 V
12/15/04 11:04:44 INFO  GTCC 1 - Digital          Ref: 2.502 V    Actual: 2.449 V
12/15/04 11:04:44 INFO  GTCC 1 - High Voltage     Ref: 137.9 V    Actual: 136.9 V
12/15/04 11:04:44 INFO  GTCC 1 - High Voltage by 2                Actual: 49.32 V

12/15/04 11:04:44 INFO  GTCC 2 - Analog A         Ref: 1.357 V    Actual: 1.290 V
12/15/04 11:04:44 INFO  GTCC 2 - Analog B         Ref: 2.549 V    Actual: 2.536 V
12/15/04 11:04:44 INFO  GTCC 2 - Digital          Ref: 2.502 V    Actual: 2.443 V
12/15/04 11:04:44 INFO  GTCC 2 - High Voltage     Ref: 137.9 V    Actual: 137.2 V
12/15/04 11:04:44 INFO  GTCC 2 - High Voltage by 2                Actual: 50.25 V

12/15/04 11:04:44 INFO  GTCC 3 - Analog A         Ref: 1.357 V    Actual: 1.306 V
12/15/04 11:04:44 INFO  GTCC 3 - Analog B         Ref: 2.549 V    Actual: 2.539 V
12/15/04 11:04:44 INFO  GTCC 3 - Digital          Ref: 2.502 V    Actual: 2.454 V
12/15/04 11:04:44 INFO  GTCC 3 - High Voltage     Ref: 137.9 V    Actual: 137.1 V
12/15/04 11:04:44 INFO  GTCC 3 - High Voltage by 2                Actual: 53.76 V

12/15/04 11:04:44 INFO  GTCC 4 - Analog A         Ref: 1.357 V    Actual: 1.312 V
12/15/04 11:04:44 INFO  GTCC 4 - Analog B         Ref: 2.549 V    Actual: 2.542 V
12/15/04 11:04:44 INFO  GTCC 4 - Digital          Ref: 2.502 V    Actual: 2.477 V
12/15/04 11:04:44 INFO  GTCC 4 - High Voltage     Ref: 137.9 V    Actual: 136.9 V
12/15/04 11:04:44 INFO  GTCC 4 - High Voltage by 2                Actual: 51.79 V

12/15/04 11:04:44 INFO  GTCC 5 - Analog A         Ref: 1.357 V    Actual: 1.323 V
12/15/04 11:04:44 INFO  GTCC 5 - Analog B         Ref: 2.549 V    Actual: 2.551 V
12/15/04 11:04:44 INFO  GTCC 5 - Digital          Ref: 2.502 V    Actual: 2.481 V
12/15/04 11:04:44 INFO  GTCC 5 - High Voltage     Ref: 137.9 V    Actual: 136.7 V
12/15/04 11:04:44 INFO  GTCC 5 - High Voltage by 2                Actual: 49.26 V

12/15/04 11:04:44 INFO  GTCC 6 - Analog A         Ref: 1.357 V    Actual: 1.323 V
12/15/04 11:04:44 INFO  GTCC 6 - Analog B         Ref: 2.549 V    Actual: 2.554 V
12/15/04 11:04:44 INFO  GTCC 6 - Digital          Ref: 2.502 V    Actual: 2.477 V
12/15/04 11:04:44 INFO  GTCC 6 - High Voltage     Ref: 137.9 V    Actual: 139.3 V
12/15/04 11:04:44 INFO  GTCC 6 - High Voltage by 2                Actual: 49.02 V

12/15/04 11:04:44 INFO  GTCC 7 - Analog A         Ref: 1.357 V    Actual: 1.318 V
12/15/04 11:04:44 INFO  GTCC 7 - Analog B         Ref: 2.549 V    Actual: 2.551 V
12/15/04 11:04:44 INFO  GTCC 7 - Digital          Ref: 2.502 V    Actual: 2.478 V
12/15/04 11:04:44 INFO  GTCC 7 - High Voltage     Ref: 137.9 V    Actual: 136.1 V
12/15/04 11:04:44 INFO  GTCC 7 - High Voltage by 2                Actual: 49.69 V

12/15/04 11:04:50 INFO  GCCC 0 - Analog           Ref: 3.330 V    Actual: 3.194 V
12/15/04 11:04:50 INFO  GCCC 0 - Digital          Ref: 3.274 V    Actual: 3.091 V
12/15/04 11:04:50 INFO  GCCC 0 - High Voltage     Ref: 95.69 V    Actual: 98.16 V

12/15/04 11:04:50 INFO  GCCC 1 - Analog           Ref: 3.330 V    Actual: 3.213 V
12/15/04 11:04:50 INFO  GCCC 1 - Digital          Ref: 3.274 V    Actual: 3.145 V
12/15/04 11:04:50 INFO  GCCC 1 - High Voltage     Ref: 95.69 V    Actual: 97.17 V

12/15/04 11:04:50 INFO  GCCC 2 - Analog           Ref: 3.330 V    Actual: 3.194 V
12/15/04 11:04:50 INFO  GCCC 2 - Digital          Ref: 3.274 V    Actual: 3.137 V
12/15/04 11:04:50 INFO  GCCC 2 - High Voltage     Ref: 95.69 V    Actual: 95.94 V

12/15/04 11:04:50 INFO  GCCC 3 - Analog           Ref: 3.330 V    Actual: 3.189 V
```

temFe_20041215_110406

```
12/15/04 11:04:50 INFO  GCCC 3 - Digital          Ref: 3.274 V    Actual: 3.174 V
12/15/04 11:04:50 INFO  GCCC 3 - High Voltage     Ref: 95.69 V    Actual: 95.45 V

12/15/04 11:04:51 INFO  All tests successfuly completed
```

temFifo_20041215_110510

12/15/04 11:06:26 INFO All tests successfuly completed

```
11:10:46  default tem status 0xb0000
11:10:46  running temConfigTest
11:10:46  redundant GEM test missing in temConfigTest
11:10:46  entering temConfigParity test
11:10:46  entering tkr tack parity bit test
11:10:48  entering tkr internal parity bit test
11:10:50  entering tkr token parity bit test
11:10:52  entering temCalInternalParityTest
11:10:52  entering temResponseParity test
11:10:52  entering temConfigTrigBufTest test
11:10:54  temConfigCableConTimeoutTest does not exist yet
11:10:54  done with subtest(s), found 0 errors; total errors: 0
11:10:56  functional test(s) interrupted, found 0 total errors
11:10:59  default tem status 0xb0000
11:10:59  running temConfigTest
11:10:59  redundant GEM test missing in temConfigTest
11:10:59  entering temConfigParity test
11:10:59  entering tkr tack parity bit test
11:11:01  entering tkr internal parity bit test
11:11:03  entering tkr token parity bit test
11:11:05  entering temCalInternalParityTest
11:11:05  entering temResponseParity test
11:11:05  entering temConfigTrigBufTest test
11:11:07  temConfigCableConTimeoutTest does not exist yet
11:11:07  done with subtest(s), found 0 errors; total errors: 0
11:11:09  running temDatamasksTest
11:11:10  entering temDatamasksDiag test
11:11:11  entering temDatamasksCal test
11:11:12  entering temDatamasksTkr test
11:11:13  done with subtest(s), found 0 errors; total errors: 0
11:11:15  running temStatusTest
11:11:15  entering temConstatComParity test
11:11:15  entering temConstatPrimaryParity test
11:11:15  entering temConstatComPrefixParity test
11:11:15  entering temConstatTrigMessParity test
11:11:15  entering temConstatTag test
11:11:23  entering temConstatCable test
11:11:30  entering temConstatTimeout test
11:11:31  entering temConstatComParity test
11:11:31  entering temConstatRedundantParity test
11:11:31  entering temConstatRedundantSelected test
11:11:31  entering temConstatEventsSent test
11:11:34  done with subtest(s), found 0 errors; total errors: 0
11:11:36  running temComrespStatTest
11:11:36  entering temComrespStatTest test
11:11:36  takes a few minutes as stands
11:12:11  done with subtest(s), found 0 errors; total errors: 0
11:12:13  running temCaltrgseqTest
11:12:13  entering cal TrigSeq test
11:12:14  done with subtest(s), found 0 errors; total errors: 0
11:12:16  running temTkrtrgseqTest
11:12:16  entering gtccTrgSeqTack test
11:12:17  done with subtest(s), found 0 errors; total errors: 0
11:12:19  running temAddressTest
11:12:19  entering temAddress test
11:12:19  done with subtest(s), found 0 errors; total errors: 0
11:12:21  running gticPowerSupplyControlTest
11:12:21  entering gticPowerSupplyControl test
11:12:32  done with subtest(s), found 0 errors; total errors: 0
11:12:34  running gticConstatComParityTest
11:12:34  entering gticConstatComParity test
11:12:34  done with subtest(s), found 0 errors; total errors: 0
11:12:36  running gticInputmaskTest
```

```
11:12:36  gticInputmask test does not exist
11:12:36  done with subtest(s), found 0 errors; total errors: 0
11:12:38  running gcccConfigTest
11:12:38  entering ccConfigFifoFullCond test
11:12:38  entering Cal sum subtest
11:12:40  entering Cal err subtest
11:12:42  entering Cal data subtest
11:12:44  entering Cal diag subtest
11:12:46  done with subtest(s), found 0 errors; total errors: 0
11:12:48  running gcccLayermaskTest
11:12:48  entering gcccLayermaskTest
11:13:05  done with subtest(s), found 0 errors; total errors: 0
11:13:07  running gcccConfigTest
11:13:07  entering ccConfigFifoFullCond test
11:13:07  entering Cal sum subtest
11:13:09  entering Cal err subtest
11:13:10  entering Cal data subtest
11:13:13  entering Cal diag subtest
11:13:14  done with subtest(s), found 0 errors; total errors: 0
11:13:16  running gcccLatstatFifoTest
11:13:16  entering gcccLatstatFifo test
11:14:43  done with subtest(s), found 0 errors; total errors: 0
11:14:45  running gcccTimeoutTest
11:14:45  entering gcccTimeout test
11:14:48  done with subtest(s), found 0 errors; total errors: 0
11:14:50  running gcccTrgalignTest
11:14:50  gcccTrgalign test does not exist: probably a scope test
11:14:50  done with subtest(s), found 0 errors; total errors: 0
11:14:52  running gcccConfigTest
11:14:52  entering ccConfigFifoFullCond test
11:14:52  entering Cal sum subtest
11:14:53  entering Cal err subtest
11:14:55  entering Cal data subtest
11:14:57  entering Cal diag subtest
11:14:59  done with subtest(s), found 0 errors; total errors: 0
11:15:01  running gtccInputmaskTest
11:15:01  entering gtccInputmaskTest
11:15:10  done with subtest(s), found 0 errors; total errors: 0
11:15:12  running gtccConfigTest
11:15:12  entering gtccConfigCableLength test
11:15:13  entering ccConfigFifoFullCond test
11:15:13  entering tkr sum subtest
11:15:15  entering tkr diag subtest
11:15:43  entering tkr tot subtest
11:15:46  entering tkr err subtest
11:15:49  entering tkr data subtest
11:15:50  done with subtest(s), found 0 errors; total errors: 0
11:15:52  running gtccLatstatFifoTest
11:15:52  entering gtccLatstatFifo test
11:16:01  n.b.: in gtccLatstatFifo; it is not possible to test data fifo write full
bits
11:17:05  done with subtest(s), found 0 errors; total errors: 0
11:17:07  running gtccTimeoutTest
11:17:07  entering gtccTimeout test
11:17:28  done with subtest(s), found 0 errors; total errors: 0
11:17:30  running gtccTrgalignTest
11:17:30  gtccTrgalign test does not exist: probably a scope test
11:17:30  done with subtest(s), found 0 errors; total errors: 0
11:17:32  done with functional test(s), found 0 total errors
```

tps_0386_612_20041215_105942

10:59:43 TPS calibration data for TPS 0386
10:59:44 please wait approx. 30 sec for the system to settle
11:00:09 dv 0.003860: current 0.130000
11:00:13 dv 0.009021: current 0.470000
11:00:19 dv 0.012064: current 0.672000
11:00:23 dv 0.017225: current 1.007000
11:00:23 slope,intercept

11:00:23 65.658863,-0.122454