FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE

Richard A Schnurr

Rick Schnurr 745.2

Tim Gruner 745.2

David Everett 12/13/93

Dave Everettt 743.1

R Kolecki 12/3/93

Ron Kolecki 303.0

This procedure is intended to characterize and initialize the magnetic properties of a FAST MUE electronics board assembly.

Call Quality Assurance before starting procedure.	Verify_____
Set up ESD station in Mag Cal Facility.	Verify_____
Place printed wiring board on measurement stand.	Verify_____
Measure Magnetic properties of Card.	Verify_____
Degause Card.	Verify_____
Measure Magnetic properties of Card.	Verify_____
Apply a ~~one~~ three gauss feild to the card.	Verify_____
Measure Magnetic properties of Card.	Verify_____
Degause Card.	Verify_____
Measure Magnetic properties of Card.	Verify_____
Repack Card in ESD container.	Verify_____

FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE
Flight BCC

Richard A Schnurr
Rick Schnurr 745.2

Tim Gruner 745.2

Dave Everett 12/13/93
Dave Everettt 743.1

R. Kolecki 12/3/93
Ron Kolecki 303.0

MUE Flight BCC Battery charge control

This procedure is intended to characterize and initialize the magnetic properties of a FAST MUE electronics board assembly.

Call Quality Assurance before starting procedure.	Verify RBS
Set up ESD station in Mag Cal Facility.	Verify RBS
Place printed wiring board on measurement stand.	Verify RBJ → Remove connector saver. RBS
Measure Magnetic properties of Card.	Verify RBJ
Degause Card. 30 gauss	Verify RBJ
Measure Magnetic properties of Card.	Verify RBJ
Apply a ~~one~~ Three gauss feild to the card. in X direction	Verify RBS
Measure Magnetic properties of Card.	Verify RBS
Degause Card. 30 gauss	Verify RBS
Measure Magnetic properties of Card.	Verify ____ skipped
Repack Card in ESD container.	Verify RBS

Top of Box North (X)

card UP

FAST MUE BCC BCC/1 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

NETIZATION DISTANCE (M)
INITIAL PERM PROBE 1= 1 : PROBE 2= 1.25 : PROBE 3= 1.5

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	-.3	-.5	-.2	-.3	-.3	-.0	.1	-.3	.2
10	0.0	-.5	-.3	.1	.1	.1	-.1	-.4	.2
20	-.5	-.1	-.4	-.4	-.5	-.0	-.1	-.3	.1
30	-.3	-.3	-.4	.2	-.2	.1	-.1	-.3	.2
40	-.2	-.6	-.3	-.3	-.3	.1	-.1	0.0	.2
50	-.4	.1	-.3	.1	-.4	-.1	-.1	0.0	.1
60	0.0	-.5	-.3	.4	-.2	.0	-.1	-.1	.2
70	-.6	-.3	-.1	.1	-.4	.3	-.3	-.2	.2
80	.1	.1	-.3	.3	.1	.1	-.1	-.2	.1
90	-.2	-.3	-.4	.1	-.1	.0	-.1	-.2	.1
100	-.4	-.5	-.3	.1	-.3	-.0	-.1	-.2	.1
110	-.2	-.5	-.4	.2	-.3	-.0	-.2	-.1	.1
120	-.2	-.6	-.4	.1	-.4	.0	-.2	-.1	.1
130	-.2	-.4	-.4	.2	-.3	.0	-.2	-.2	.1
140	.1	-.5	-.3	.2	-.3	.0	-.1	-.2	.1
150	0.0	-.4	-.4	.5	-.2	-.0	-.1	-.2	.1
	-.1	-.4	-.3	.2	-.4	.0	.1	-.3	.1
	-.1	-.4	-.3	.4	-.3	.1	-.1	-.2	.2
180	0.0	-.3	-.4	.3	-.2	-.1	-.2	0.0	.1
190	-.2	-.5	-.3	.5	-.4	-.1	-.1	-.1	.1
200	.1	-.6	-.5	.4	-.5	-.1	-.1	-.1	.1
210	.2	-.5	-.4	.6	-.4	.1	.1	-.1	.1
220	0.0	.2	-.3	.4	.3	.1	.1	-.2	.1
230	.1	-.4	-.3	.5	-.3	.0	.1	-.2	.2
240	-.2	-.2	-.3	-.1	-.4	.0	.1	-.1	.1
250	-.3	-.4	-.3	-.1	-.3	-.0	-.2	0.0	.1
260	-.5	-.4	-.2	-.3	-.3	.0	-.1	-.2	.2
270	-.2	-.4	-.4	.1	-.2	.1	-.3	-.1	.2
280	-.5	-.2	-.3	.1	-.2	-.0	.1	-.1	.1
290	-.4	-.1	-.2	.1	-.2	.0	-.1	-.2	.1
300	-.4	-.1	-.1	-.1	-.2	.1	-.2	-.2	.2
310	-.3	-.3	-.2	.1	-.2	-.1	-.1	-.1	.2
320	.1	-.8	-.4	.4	-.1	.0	-.2	-.2	.2
330	0.0	.1	-.2	-.1	-.5	-.1	-.1	-.1	.2
340	-.3	-.3	-.1	-.2	-.4	.1	.1	-.3	.2
350	.2	-.4	-.2	.4	-.5	.0	-.1	-.1	.1

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
-.5	-.0	[illegible]9.5	[illegible]9.5

FAST MUE BCC BCC/3 DATE:12/13/93

NETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION DISTANCE (M)
POST DEPERM PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	.6	.1	-5.2	-.8	.1	-.9	-.7	.1	.0
10	-.2	.2	-5.0	-.5	.3	-.2	-.3	.1	-.2
20	.3	-.3	-5.4	-.6	-.4	-.9	-.6	.1	-.2
30	-.3	-.1	-5.3	-.6	.7	-1.4	-.8	0.0	-.1
40	-.4	-.2	-5.6	-.2	.2	-.7	-.4	-.1	.0
50	-.7	.2	-5.5	-.8	-.2	-.8	-.6	-.1	-.3
60	.6	.3	-5.9	-.2	-.4	-1.4	-.6	.1	-.3
70	.2	0.0	-5.6	.2	.1	-.8	-.6	.1	-.1
80	.3	-.4	-7.5	-.6	.1	-1.0	-.6	0.0	-.2
90	.1	-.2	-7.1	-.7	0.0	-1.2	-.7	-.1	-.1
100	.6	0.0	-7.3	-.3	-.6	-1.0	-.9	-.3	-.1
110	-.6	.1	-7.0	-.9	-.1	-.4	-.7	-.1	-.3
120	-.2	-.2	-8.0	-.7	-.4	-1.0	-.8	0.0	-.0
130	-.2	-.1	-5.6	-.2	-.5	-.8	-.6	-.2	.0
140	-1.2	-.4	-7.7	-.9	.3	-1.1	-.6	-.2	-.2
)	-.9	-.1	-7.1	-.7	.2	-1.6	-.6	-.1	-.3
J	-.4	-1.0	-5.9	.1	-.2	-.5	-.6	0.0	-.4
170	-.3	-.6	-6.0	-.4	-.3	-.5	-.7	.1	-.2
180	.6	-.9	-5.1	-.3	-.3	-.4	-.6	-.2	-.2
190	.7	-.7	-5.8	-.3	-.3	-.1	-.6	0.0	-.4
200	1.0	-.9	-4.4	-.2	-.2	-.8	-.6	-.2	-.0
210	-.1	-.6	-4.0	-1.1	0.0	-1.2	-.3	-.2	-.3
220	.9	-1.3	-4.0	-.3	-.3	-.4	-.4	-.3	-.2
230	1.7	-.5	-3.3	.5	-.4	-.4	-.6	-.1	-.2
240	.4	-.1	-3.7	-.4	.2	-.3	-.3	-.4	-.0
250	1.7	-.4	-3.3	.3	-.5	-.2	-.5	-.2	-.1
260	1.2	-.3	-3.9	.4	.1	-.1	-.7	-.5	-.2
270	1.4	-.1	-3.1	.1	-.4	-.1	-.5	-.4	-.2
280	.3	1.1	-3.6	-.9	.2	-.4	-.5	-.3	-.1
290	1.1	-.5	-3.8	.3	-.4	-.1	-.6	-.4	-.2
300	1.7	.4	-1.9	.5	-.4	-.5	-.5	-.1	-.2
310	.9	0.0	-2.4	.6	-.3	-.7	-.6	-.2	-.2
320	-.1	0.0	-3.5	-.3	.5	-1.3	-.7	0.0	-.1
330	-.3	-.1	-4.5	-.2	.4	-1.2	-.5	-.1	-.3
340	-.6	.5	-4.7	-1.5	.1	-.9	-.5	-.1	-.1
350	.2	-.1	-3.2	-.3	-.4	-.8	-.7	.1	-.2

DIPOLE MOMENTS IN GAUSS-CM^3

	X	Y	Z	T
	-.0	-.4	6.2	6.2

FAST MUE BCC BCC/2 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION DISTANCE (M)
POST 3G EXPOSURE PROBE 1= .5 : PROBE2= .75 : PROBE 2= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	1.4	-.3	-5.5	-.4	-.1	-.7	.5	-.3	-.3
10	.7	.4	-5.6	.4	-.3	-.3	.3	-.2	-.2
20	1.1	.3	-4.6	0.0	.1	-.7	.3	-.2	-.4
30	.5	.2	-4.3	-.1	.1	-.3	.2	-.3	-.3
40	.5	.4	-5.6	-.3	-.2	-1.6	.3	-.2	-.2
50	.9	.3	-5.8	-.6	0.0	-1.1	.2	-.1	-.1
60	.9	0.0	-6.1	1.1	0.0	-.7	.5	-.1	-.0
70	1.1	.4	-7.0	0.0	-.2	-.9	-.1	0.0	-.2
80	.6	-.1	-7.6	-.4	.2	-.6	.1	-.1	-.3
90	1.1	-.3	-7.9	1.3	-.1	-.5	.4	.2	-.2
100	1.4	.4	-8.8	.3	-.2	-.8	.2	.2	-.2
110	-.4	.2	-8.4	-.1	.2	-.3	.3	-.1	-.1
120	-.8	.3	-9.1	-.8	.4	-.6	.5	-.2	-.3
130	.4	-.7	-8.0	.8	-.6	-1.1	.3	-.1	-.1
140	.7	-.4	-7.4	-.1	-.2	-.6	-.5	-.1	-.1
[illegible]	-.5	.1	-7.1	-.9	-.5	-.4	.2	-.1	-.1
[illegible]	-.9	-1.0	-6.9	-.6	-.3	-.6	-.3	-.1	-.2
170	-.2	-1.0	-6.6	-.9	-.7	-.9	-.6	0.0	-.2
180	-.5	-.9	-6.8	-1.4	-.1	-.3	-.6	-.2	-.0
190	.9	-.7	-6.6	-.2	-.4	-.4	-.3	-.2	-.1
200	.5	-.7	-4.6	-.5	-.5	-.2	-.2	-.3	-.0
210	.5	-.9	-5.9	-.5	-.5	-.5	-.3	-.2	-.2
220	1.1	-.8	-4.5	-.6	-.4	-.1	-.3	-.3	-.1
230	.6	-.7	-4.8	.1	-.5	-.9	-.3	.1	-.1
240	1.2	-.7	-4.6	-.5	-.6	-.3	-.4	-.1	-.1
250	.8	-.5	-4.8	.2	-.6	-.2	-.4	-.1	-.2
260	1.3	-.9	-3.7	-.2	-.2	-.4	-.5	0.0	0.0
270	.5	-.2	-4.3	-.3	-.3	-.2	-.2	.1	-.1
280	0.0	-.3	-4.0	-.5	-.1	-.6	-.2	0.0	-.0
290	.8	-.6	-4.6	-.6	-.9	.1	-.1	0.0	-.2
300	1.0	-.7	-3.8	.3	-.5	-.2	-.3	0.0	-.1
310	1.4	-.7	-3.8	.3	-.9	-.1	-.2	-.1	-.2
320	.5	0.0	-4.1	-.9	-.2	-.7	-.3	-.1	-.1
330	-.4	-.4	-5.0	-.9	.4	-1.2	-.4	-.2	-.1
340	.5	.3	-4.5	-.8	-.3	-.5	-.2	0.0	-.2
350	.6	.6	-5.4	-.2	.4	-.6	-.4	0.0	-.1

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
.2	-.1	7.4	7.4

FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE
End Plate with Shield.

Richard J Schnurr

Rick Schnurr 745.2

Timothy D Gruner

Tim Gruner 745.2

David Everett 12/13/93

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R. Kolecki 12/3/93

Ron Kolecki 303.0

FAST MUE END PLATE W/SHIELD END/3.1 DATE:12/13/93

NETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION
POST DEPERM

DISTANCE (M)
PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	.4	-7.1	-1.1	-2.3	-.6	-.9	-.9	-.1	.7
10	2.3	-3.6	-.2	-1.7	-.4	-.3	-.8	-.2	-.1
20	1.6	-.1	-.8	-1.5	.2	-2.0	-.7	0.0	.1
30	-1.4	4.7	-.4	-2.2	.9	-1.6	-.8	0.0	.1
40	-5.7	6.4	-1.6	-2.6	.8	-1.7	-1.1	.1	.8
50	-10.7	7.6	-1.6	-3.3	1.2	-.9	-1.2	.2	.5
60	-16.4	7.0	-2.2	-4.1	.5	-2.3	-1.3	-.2	.3
70	-21.0	4.2	-3.2	-4.6	-.6	-1.3	-1.3	-.5	-.3
80	-23.2	-.1	-2.5	-5.2	-1.4	-2.5	-1.3	-.7	.4
90	-22.6	-6.4	-4.2	-5.1	-1.9	-1.5	-.9	-1.2	.4
100	-17.5	-13.8	-3.2	-4.1	-4.3	-.9	-.5	-1.4	.5
110	-9.4	-20.7	-3.7	-2.1	-5.3	-1.4	.6	-1.8	.9
120	3.4	-26.6	-1.3	.3	-5.6	-1.8	1.3	-1.9	.6
130	18.6	-29.7	-.4	2.4	-5.7	-2.0	2.2	-1.9	.9
	35.0	-29.1	1.6	5.8	-5.3	-.1	3.1	-1.7	1.0
	48.2	-23.1	2.8	8.0	-3.9	-1.3	3.7	-1.2	1.8
160	55.5	-11.8	3.1	9.5	-1.9	.2	3.8	-.5	.1
170	53.6	3.3	3.0	10.5	.4	-1.3	3.7	-.1	1.3
180	40.4	18.5	1.8	9.1	2.8	-1.2	3.3	.5	-.3
190	19.0	29.3	.7	7.1	4.0	-1.3	2.5	.9	.1
200	-3.4	30.2	-1.7	4.2	4.5	-2.5	1.9	1.1	.6
210	-19.4	22.4	-5.2	1.6	3.6	-1.9	1.3	1.2	-.4
220	-22.5	7.7	-7.3	0.0	2.6	-1.6	.8	1.0	.7
230	-14.1	-5.5	-6.6	-.6	1.2	-2.0	.6	.8	.8
240	.2	-11.4	-3.7	-.8	.8	-1.2	.7	.7	.3
250	10.6	-7.8	-2.1	.7	1.0	-1.6	.3	.7	.7
260	12.0	2.1	-.7	.3	1.7	-2.2	.1	.9	.4
270	4.6	12.2	-2.0	-.6	2.4	-1.5	-.4	1.0	.9
280	-7.3	17.2	-.5	-1.8	2.7	-.9	-.9	1.0	.4
290	-18.6	16.8	-1.9	-2.8	2.7	-1.2	-1.2	.9	-.6
300	-26.6	11.9	-2.9	-4.6	2.2	-.9	-1.7	1.0	.6
310	-28.5	4.1	-3.9	-5.2	1.0	-.8	-1.9	.6	.3
320	-25.3	-3.5	-3.5	-6.1	-.4	-.2	-1.9	.4	.2
330	-19.2	-8.4	-3.7	-5.2	-.8	-1.3	-1.8	.1	1.3
340	-11.4	-9.9	-3.8	-4.0	-1.3	-1.2	-1.6	0.0	.8
350	-4.8	-9.5	-1.8	-3.6	-1.2	-.5	-1.5	0.0	.9

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
-11.0	2.7	2.2	11.5

FAST MUE END PLATE W/SHIELD END/2.1 DATE:12/13/93

IETIZATION

PROBE DISTANCE IN METERS

MAGNETIZATION
POST 3G EXPOSURE

DISTANCE (M)
PROBE 1= .5 : PROBE2= .75 : PROBE 2= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	-	DATA SCANS							
0	.8	-6.7	-1.7	-2.1	-.6	-.5	-1.2	-.4	-.4
10	2.6	-3.0	0.0	-2.2	0.0	.2	-1.1	-.3	-.9
20	2.2	.8	0.0	-1.7	-.2	.3	-1.2	-.4	-.3
30	-.7	4.2	.2	-1.9	.5	-.4	-1.3	-.3	.3
40	-5.2	6.8	.4	-2.6	1.0	-.7	-1.5	-.2	.3
50	-10.6	8.0	-2.3	-3.6	.7	-.8	-1.7	-.2	-.6
60	-16.3	7.5	-2.0	-4.2	.4	-.3	-1.8	-.4	-.3
70	-21.2	4.6	-2.3	-5.2	-.4	-1.1	-1.9	-.8	-1.1
80	-23.0	.3	-1.5	-5.0	-1.2	-.9	-1.7	-1.0	.1
90	-22.1	-6.0	-4.5	-4.9	-2.6	.7	-1.4	-1.3	-.2
100	-18.2	-13.0	-2.9	-4.1	-3.6	.1	-.9	-1.6	-.8
110	-9.6	-20.2	-2.7	-2.8	-5.1	-1.9	-.1	-2.0	.1
120	2.9	-26.3	-1.1	-.3	-5.7	.3	.8	-2.1	-.1
130	18.0	-29.6	1.5	2.3	-5.8	.7	1.6	-2.0	-.2
[illegible]	34.5	-28.2	2.1	5.4	-5.2	.9	2.3	-1.8	-.1
	47.7	-22.3	2.8	7.8	-3.4	.6	2.9	-1.3	.6
[illegible]	54.9	-10.6	5.5	9.5	-1.5	-.3	3.2	-.7	.6
170	52.0	4.9	4.2	9.8	.9	-1.3	3.1	-.2	-.4
180	38.4	19.7	3.3	8.5	3.0	-1.2	2.8	.4	.6
190	16.1	29.5	1.0	6.9	4.3	-1.1	1.9	.7	.1
200	-6.3	30.5	-2.8	3.7	4.1	-.5	1.3	.9	-.4
210	-21.2	20.9	-3.0	1.3	3.6	-2.7	.8	.8	-1.4
220	-23.9	7.1	-6.6	-.6	2.1	-1.4	.4	.8	-1.0
230	-15.0	-6.5	-6.2	-1.0	1.2	-.6	.1	.7	.5
240	-.5	-11.9	-4.2	-.8	.3	.2	-.1	.5	-.5
250	9.7	-7.7	-.9	-.2	.9	-1.5	0.0	.4	-.1
260	11.5	2.1	-.3	.1	1.5	-1.8	-.2	.5	-.4
270	4.7	11.6	-.4	-.4	2.4	-.3	-.6	.6	-.1
280	-7.4	17.0	-.3	-1.5	2.5	-2.6	-1.0	.6	-.8
290	-19.0	16.1	-.9	-2.5	2.7	-.8	-1.5	.8	.8
300	-25.9	10.7	-2.2	-4.3	1.9	-.2	-1.6	.4	-.6
310	-27.0	3.3	-3.8	-5.0	.9	-1.0	-1.9	.1	-1.2
320	-24.2	-4.4	-3.8	-5.4	-.2	.4	-1.9	-.2	.2
330	-17.8	-8.2	-4.3	-4.6	-.8	-1.2	-1.6	-.3	.3
340	-10.2	-10.0	-1.3	-3.8	-1.2	-.5	-1.6	-.5	.4
350	-3.7	-9.5	-2.4	-3.3	-1.1	-.5	-1.5	-.5	.6

DIPOLE MOMENTS IN GAUSS-CM^3

	X	Y	Z	T
	-10.2	2.7	1.4	10.7

FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE
Flight END Plate

Richard Schnurr

Rick Schnurr 745.2

Tim Gruner

Tim Gruner 745.2

David Everett 12/13/93

Dave Everettt 743.1

R. Kolecki 12/3/93

Ron Kolecki 303.0

MUE Flight end plate

This procedure is intended to characterize and initialize the magnetic properties of a FAST MUE electronics board assembly.

Call Quality Assurance before starting procedure.		Verify RGS
Set up ESD station in Mag Cal Facility.		Verify RGS → Removed connector savers RGS
Place printed wiring board on measurement stand.		Verify RGS
Measure Magnetic properties of Card.	1M 6.2 gamma	Verify RGS
Degause Card.	30 gauss X into Y a little	Verify RGS
Measure Magnetic properties of Card.	1M 6.2 gamma	Verify RGS
Apply a ~~one~~ three gauss feild to the card.		Verify RGS
Measure Magnetic properties of Card.	1M 6.0 gamma	Verify RGS
Degause Card.		Verify RGS
Measure Magnetic properties of Card.		Verify
Repack Card in ESD container.		Verify RGS

Top of Box north

Card UP

FAST MUE END PLATE END/1 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

NETIZATION
INITIAL PERM

DISTANCE (M)
PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	35.9	10.3	3.5	10.3	4.4	1.0	4.1	2.1	.6
10	30.9	15.3	3.8	8.7	5.8	.6	3.2	2.5	-.1
20	24.2	20.7	2.0	7.6	6.7	0.0	2.4	3.0	.7
30	15.3	25.8	2.2	4.9	7.8	.1	1.4	3.1	.1
40	3.2	28.8	1.2	2.2	7.9	.4	-.1	3.3	.6
50	-8.5	30.3	.6	-1.0	8.0	.8	-1.2	3.3	-.2
60	-21.6	29.7	-1.6	-4.3	8.0	-.2	-2.6	3.2	.4
70	-32.7	27.3	-3.2	-7.4	7.1	-.3	-3.5	3.0	-.5
80	-41.9	23.0	-3.5	-9.9	6.7	-.2	-4.5	2.4	-.3
90	-48.2	15.9	-5.0	-12.1	4.5	.3	-5.3	1.8	.2
100	-51.2	8.4	-4.7	-14.0	2.6	-.7	-5.6	1.3	-.4
110	-48.6	.1	-5.4	-14.4	1.3	-.3	-5.5	.5	-.3
120	-42.9	-8.2	-4.4	-13.7	-.8	-.1	-5.7	-.2	-.3
130	-32.7	-14.0	-3.8	-12.7	-2.4	-.1	-5.1	-.7	-.6
140	-21.2	-16.9	-2.7	-10.8	-2.3	.7	-4.8	-.9	-.2
150	-11.3	-14.8	-1.6	-9.2	-1.9	0.0	-4.4	-.9	.2
	-6.8	-8.5	-.2	-8.8	-2.0	.6	-3.9	-.8	-.4
J	-8.1	-.3	-.8	-7.6	-1.9	.3	-3.7	-1.2	-.1
180	-18.4	8.0	-1.8	-7.9	-1.4	-1.1	-3.5	-1.4	.1
190	-33.7	10.8	-2.4	-8.9	-1.9	-1.6	-3.1	-1.8	.3
200	-46.4	4.8	-5.7	-9.0	-3.7	-1.6	-2.8	-2.3	-.4
210	-50.0	-10.2	-6.6	-8.8	-5.7	-.5	-1.9	-2.9	-.6
220	-37.8	-28.6	-7.2	-7.1	-7.4	.2	-1.0	-3.3	.1
230	-13.7	-44.6	-4.7	-3.5	-9.4	-.2	.6	-3.8	-.5
240	16.4	-49.2	-1.6	.3	-9.8	-.3	2.0	-3.6	.6
250	39.9	-42.9	1.4	4.9	-8.7	1.5	3.3	-3.4	.2
260	52.7	-29.2	3.9	8.7	-6.8	.8	4.4	-2.8	.4
270	55.3	-13.9	6.1	11.8	-5.2	1.8	5.2	-2.2	.5
280	48.5	-2.9	5.6	12.1	-3.0	1.2	5.5	-1.5	.9
290	41.5	3.6	5.4	12.8	-1.4	2.0	5.8	-1.0	.6
300	34.9	4.3	3.3	13.0	-.7	2.1	5.9	-.4	1.0
310	32.0	2.8	5.2	12.4	.2	.1	6.2	-.1	-.3
320	31.9	.3	3.2	12.2	1.0	.8	5.9	.3	.8
330	34.1	-.2	1.6	11.9	1.3	1.3	5.6	.7	1.0
340	36.4	1.5	1.7	11.9	2.0	.2	5.3	1.2	1.1
350	36.8	5.5	1.0	11.0	4.0	.5	4.8	1.6	1.1

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
17.8	-20.0	.7	26.8

FAST MUE END PLATE END/3 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION
POST DEPERM

DISTANCE (M)
PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	35.3	10.2	4.2	11.9	4.3	-.7	4.5	2.0	.6
10	30.4	15.2	2.9	9.8	5.4	-.3	3.6	2.5	.5
20	23.5	20.6	3.1	8.1	6.9	.1	2.5	2.9	.6
30	14.4	25.4	2.5	5.7	7.1	-.7	1.4	3.2	-.3
40	2.8	28.6	1.4	2.3	7.9	-1.2	.1	3.2	.4
50	-10.3	30.0	-.5	-1.1	8.0	-1.3	-1.7	3.2	-.2
60	-22.1	29.7	-1.6	-3.6	8.3	-.8	-2.8	3.3	-.3
70	-33.2	27.3	-3.0	-6.6	7.2	-.7	-4.1	3.0	-.2
80	-42.6	23.1	-3.5	-9.6	5.9	-1.9	-4.8	2.5	-.6
90	-48.7	15.7	-5.0	-11.6	4.8	-.8	-5.7	1.8	-.5
100	-51.3	7.7	-5.0	-12.9	2.4	-1.3	-6.0	1.3	.2
110	-49.3	-.3	-5.2	-13.1	1.6	-1.6	-6.2	.8	-.1
120	-42.9	-8.3	-4.5	-13.6	-.8	-1.7	-6.1	.1	-.6
130	-33.3	-14.4	-3.4	-12.2	-1.5	-1.4	-5.4	-.4	-.9
140	-21.8	-16.9	-4.0	-10.7	-3.1	-.3	-5.2	-.8	-.5
	-11.4	-15.8	-1.7	-8.9	-2.7	-1.0	-4.6	-1.1	-.5
	-5.9	-9.8	-1.1	-7.5	-2.6	-.7	-4.3	-1.2	.2
170	-7.2	-.5	-1.1	-7.1	-1.3	-.6	-4.0	-1.3	-.3
180	-17.0	7.2	-2.4	-7.1	-1.5	-1.4	-3.7	-1.4	-.2
190	-31.5	9.7	-3.5	-7.5	-1.7	-2.1	-3.4	-1.6	-.2
200	-43.8	4.3	-6.1	-8.1	-3.6	-2.4	-3.1	-1.9	.5
210	-47.4	-10.0	-6.6	-7.6	-5.3	-.7	-2.3	-2.5	-.7
220	-35.6	-28.2	-6.7	-5.6	-7.5	-1.2	-1.2	-3.0	-.4
230	-12.2	-42.8	-5.8	-2.6	-8.5	-1.2	.2	-3.4	.2
240	16.6	-47.6	-2.8	1.7	-9.4	.1	1.4	-3.5	-.2
250	39.8	-41.8	1.5	5.3	-8.4	-.4	2.9	-3.2	-.4
260	52.0	-27.5	2.7	9.4	-6.7	-.4	3.9	-2.6	.4
270	54.0	-12.8	5.0	11.5	-4.6	.6	4.8	-1.9	.9
280	47.8	-1.8	6.3	13.4	-3.0	.1	5.1	-1.2	.5
290	39.1	4.1	5.4	12.6	-1.1	-.8	5.4	-.7	1.0
300	32.5	5.1	3.8	12.8	-.2	-1.6	5.4	-.1	.1
310	29.7	2.6	4.7	12.2	.1	-.4	5.4	.1	-.4
320	30.2	.9	1.5	12.1	1.4	-.5	5.4	.4	.2
330	32.7	.7	2.6	12.2	1.9	-.9	4.9	.7	.7
340	34.8	1.6	3.0	11.6	2.2	-.8	4.7	1.1	.2
350	36.0	5.5	3.7	11.9	3.5	-.7	4.2	1.8	.3

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
17.0	-20.0	.5	26.2

FAST MUE END PLATE END/2 DATE:12/13/93

NETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION
POST 3G EXPOSURE

DISTANCE (M)
PROBE 1= .5 : PROBE2= .75 : PROBE 2= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	35.8	10.4	2.2	10.1	4.6	-.3	4.0	2.0	.8
10	31.9	14.7	2.5	9.0	5.1	1.3	3.3	2.4	-.6
20	24.5	20.1	1.8	7.9	6.1	.1	2.3	2.8	0.0
30	16.0	25.6	.8	6.1	7.3	.5	1.2	3.3	-.2
40	4.5	28.2	.5	2.8	7.7	.2	-.2	3.3	-.3
50	-8.4	30.1	-1.5	-.8	8.1	-.2	-1.3	3.2	-.2
60	-20.1	30.1	-2.0	-3.9	8.1	.7	-2.5	3.1	-.2
70	-31.8	27.7	-3.7	-6.3	7.4	.5	-3.6	2.9	-.3
80	-41.6	23.4	-5.2	-10.3	6.6	.2	-4.4	2.4	-.1
90	-49.1	16.0	-5.6	-12.3	4.8	-.3	-5.3	1.8	-.9
100	-53.1	8.2	-6.6	-12.7	2.5	-.7	-5.7	1.3	-.3
110	-54.1	.9	-7.0	-13.7	1.3	-.5	-5.7	.6	-.5
120	-43.7	-7.7	-7.2	-14.3	-.5	-.6	-5.6	0.0	-1.0
130	-32.9	-14.4	-4.2	-12.1	-2.3	.3	-5.4	-.3	-.8
	-21.5	-17.3	-3.7	-10.4	-2.8	.1	-4.9	-1.0	-1.3
	-11.2	-15.7	-2.8	-9.0	-2.7	.3	-4.5	-1.0	-1.0
160	-5.1	-9.5	-.9	-8.3	-2.3	-1.3	-4.0	-1.1	-.4
170	-8.4	-.6	-3.4	-7.7	-1.8	.2	-3.5	-1.3	-.8
180	-17.8	7.7	-4.0	-8.1	-1.5	-.3	-3.4	-1.3	-.8
190	-32.3	10.3	-5.6	-8.0	-2.1	-.6	-3.4	-1.6	.1
200	-44.9	4.6	-6.8	-8.9	-3.5	-.5	-2.7	-2.0	-.3
210	-47.2	-10.7	-8.3	-8.0	-5.6	1.5	-2.1	-2.5	-.6
220	-35.8	-28.6	-8.5	-6.3	-7.8	-.8	-1.1	-2.9	.4
230	-12.4	-43.7	-6.7	-3.4	-9.1	.4	.3	-3.4	-.2
240	16.2	-48.4	-2.7	2.0	-9.7	-1.4	1.7	-3.6	-.2
250	40.5	-41.7	-.4	5.4	-8.6	.1	3.3	-3.3	.2
260	52.4	-28.5	2.4	9.4	-6.5	.8	4.6	-2.7	-.8
270	54.0	-13.7	4.1	11.6	-4.7	-.8	5.1	-2.0	-.8
280	48.6	-3.0	4.8	12.8	-3.1	.3	5.5	-1.4	-.2
290	40.4	3.3	2.9	13.0	-1.4	2.5	5.6	-.8	.7
300	34.1	4.1	3.4	12.7	-.5	1.2	5.8	-.5	0.0
310	31.2	2.2	2.1	12.1	.2	1.1	5.6	0.0	0.0
320	32.3	.3	1.7	12.4	.6	1.6	5.6	.4	-.2
330	33.8	-.1	1.1	12.0	1.2	.6	5.4	.7	.1
340	35.9	1.5	2.3	11.9	1.9	.3	5.1	1.3	-.4
350	37.2	5.0	1.4	11.4	3.3	1.6	4.7	1.6	.7

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
17.6	-19.9	2.4	26.7

FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE
Flight Power distribution

Richard A Schnurr
Rick Schnurr 745.2

Timothy D Gruner
Tim Gruner 745.2

David Everett 12/13/93
Dave Everettt 743.1

R Kolecki 12-13-93
Ron Kolecki 303.0

MUE Flight Power distribution

This procedure is intended to characterize and initialize the magnetic properties of a FAST MUE electronics board assembly.

Call Quality Assurance before starting procedure.	Verify RGS
Set up ESD station in Mag Cal Facility.	Verify RGS
Place printed wiring board on measurement stand. → Remove connector savers RGS	Verify RGS
Measure Magnetic properties of Card. 2 gamma / Meter Field North	Verify RGS
Degause Card. 30 g	Verify RGS
Measure Magnetic properties of Card. 2 gamma / Meter Field North	Verify RGS
Apply a ~~one~~ three gauss feild to the card. 0.2 gamma shift	Verify RGS
Measure Magnetic properties of Card.	Verify RGS
Degause Card. 30 g	Verify RGS
Measure Magnetic properties of Card.	Verify ____ Delete
Repack Card in ESD container.	Verify 12 GS

Top of Box North
card up

FAST MUE PCU PCU/3 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

NETIZATION DISTANCE (M)
PUST DEPERM PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	3.1	.1	-2.5	2.0	.5	-1.2	1.4	.3	.1
10	3.7	.1	-2.9	2.6	.5	-1.3	1.2	.4	-1.1
20	4.1	.5	-2.4	2.4	.3	.2	1.1	.3	-.9
30	5.3	0.0	-1.9	2.1	.2	0.0	1.3	.3	.1
40	4.5	-.2	-2.4	2.2	.5	-.6	1.2	.6	-.1
50	5.1	0.0	-2.5	1.7	.3	-.4	1.1	.4	.5
60	4.7	.3	-1.3	1.7	.8	-1.1	1.0	.6	-.5
70	4.8	1.2	-.8	1.5	.6	-.7	.9	.6	-.9
80	4.3	1.7	-1.9	1.5	1.6	-.3	1.1	.6	-.9
90	4.7	2.4	-1.6	1.7	1.2	0.0	1.0	.6	-.6
100	3.9	4.0	-1.3	1.3	2.1	.2	.7	.8	-1.2
110	2.5	4.6	-1.7	.6	1.6	-1.6	.5	.9	-.8
120	.6	6.2	-2.1	.4	2.1	-1.0	-.2	1.1	-.2
130	-2.3	7.4	-3.2	-.8	2.1	-.9	-.5	1.0	.1
140	-5.8	9.1	-2.3	-1.4	2.3	-.5	-.8	1.0	-1.6
[illegible]	-10.1	10.5	-2.4	-2.3	2.5	-1.4	-1.2	1.2	-.9
	-15.4	11.4	-4.1	-3.3	2.4	-.6	-1.4	1.1	-.7
[illegible]	-21.9	11.6	-4.2	-5.0	2.1	-.9	-1.9	.9	-1.1
180	-27.6	9.9	-6.2	-5.6	1.7	-1.2	-2.2	.7	-.4
190	-32.5	6.1	-7.3	-6.6	.5	-1.0	-2.2	.1	.1
200	-34.5	.2	-8.0	-7.0	-.7	-1.4	-2.0	-.1	-1.0
210	-32.0	-6.6	-7.5	-6.3	-2.0	-.9	-1.9	-.8	-1.2
220	-25.2	-13.9	-6.9	-5.8	-2.7	-.9	-1.8	-1.0	-.6
230	-14.9	-18.4	-6.3	-4.6	-3.4	-1.1	-1.3	-1.3	-.4
240	-3.3	-19.8	-7.3	-2.5	-3.8	-1.1	-.6	-1.4	-.6
250	5.9	-17.5	-5.9	-.8	-3.9	-1.7	-.1	-1.3	-1.0
260	12.1	-13.6	-4.8	.5	-2.7	-.6	.7	-1.1	-.6
270	15.0	-8.7	-3.0	2.2	-2.5	-.7	.8	-.8	.1
280	14.7	-3.9	-3.9	3.1	-1.4	-2.0	1.2	-.9	-1.0
290	13.2	-.8	-2.5	3.4	-1.3	-1.4	1.2	-.4	-.9
300	10.7	1.4	-2.8	3.4	-.6	-1.5	1.4	-.4	-.5
310	7.7	2.0	-2.8	3.2	-.3	-1.6	1.4	-.2	-.7
320	5.8	1.9	-4.0	2.8	.1	-1.4	1.4	-.1	-.6
330	4.6	1.8	-4.4	2.6	.2	-1.4	1.3	-.1	.3
340	3.6	1.6	-3.3	2.1	.4	.1	1.1	0.0	-.9
350	3.3	1.0	-2.4	2.0	.4	-1.5	1.1	0.0	-.5

DIPOLE MOMENTS IN GAUSS-CM^3

	X	Y	Z	T
[illegible]	8.8	-.0	4.5	9.9

FAST MUE PCU PCU/2 DATE:12/13/93

MAGNETIZATION

PROBE DISTANCE IN METERS

MAGNETIZATION
POST 3G EXPOSURE

DISTANCE (M)
PROBE 1= .5 : PROBE2= .75 : PROBE 2= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	3.3	.1	-2.6	1.9	.3	-1.0	1.1	-.2	-.2
10	4.1	.2	-2.9	2.0	.1	-.8	.9	-.2	-.2
20	4.3	-.3	-2.6	2.2	.2	-1.0	1.0	-.1	-.3
30	4.5	.4	-2.5	1.9	.2	-1.4	.9	.1	-.4
40	5.1	-.5	-2.2	2.6	.2	-.7	.9	.1	.5
50	5.2	.1	-4.0	1.7	.5	-.4	.9	.1	-.4
60	5.0	.7	-.8	2.0	.6	-.5	.6	.1	-.7
70	4.6	1.1	-1.4	1.2	.6	-.7	.6	-.2	-.1
80	3.9	1.9	-1.8	1.1	.8	-1.2	.5	.1	-.8
90	3.7	2.8	-2.5	1.3	1.1	-.9	.3	.2	0.0
100	2.6	4.0	-1.3	1.1	1.5	-1.0	.1	.3	0.0
	1.6	4.8	-1.3	.2	1.7	-1.8	-.1	.5	-.7
	-.4	6.2	-2.8	.1	2.0	-1.3	-.5	.7	-1.1
130	-3.0	7.7	-2.7	-1.3	2.2	-1.7	-.8	.8	-.5
140	-7.0	9.2	-2.7	-1.6	2.4	-1.0	-1.0	.9	-.9
150	-11.4	10.5	-3.6	-3.1	2.4	.3	-1.5	.9	-.7
160	-16.9	11.0	-4.7	-3.9	2.5	.1	-2.0	.6	-.9
170	-23.1	11.5	-4.4	-5.6	2.2	-1.2	-2.3	.4	-.6
180	-29.4	9.8	-5.6	-6.2	1.4	-.9	-2.6	.1	-.6
190	-34.0	6.6	-7.6	-7.5	.8	-1.7	-2.8	-.2	-1.0
200	-35.7	.1	-7.4	-7.3	-.6	-1.5	-2.8	-.7	-.6
210	-33.6	-6.8	-7.6	-7.5	-2.2	-1.4	-2.4	-1.1	-1.2
220	-26.7	-14.2	-7.8	-6.7	-2.7	-2.0	-2.1	-1.3	-.9
230	-16.0	-18.6	-8.3	-5.1	-3.2	-.6	-1.6	-1.8	-1.6
240	-4.6	-20.4	-6.7	-2.9	-4.2	-1.3	-.9	-1.8	-1.5
250	5.2	-18.3	-6.6	-1.0	-4.0	-1.9	-.1	-1.7	0.0
260	11.5	-14.3	-4.4	.3	-3.5	-1.5	.4	-1.6	-.6
270	14.6	-9.5	-3.4	2.1	-2.7	-.8	.7	-1.4	-1.2
280	15.1	-4.9	-4.4	2.4	-1.8	-1.4	1.0	-1.2	-.7
290	13.5	-1.0	-3.7	3.2	-1.3	-.5	1.2	-1.0	-.4
300	10.6	.8	-2.7	3.3	-.4	-1.8	1.1	-.9	-.6
310	8.1	1.9	-2.6	3.1	-.3	-1.4	1.3	-.4	-.9
320	6.4	1.5	-3.1	3.2	-.3	-.7	1.2	-.3	-1.3
330	4.6	1.3	-4.7	2.9	.6	-1.6	1.2	-.1	-1.1
340	3.6	1.3	-4.4	2.4	.2	-2.0	1.1	-.1	-.9
350	3.6	.9	-4.1	2.2	.2	-1.9	1.0	-.1	-.5

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
9.4	-.1	4.9	10.6

FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE
Flight Power distribution

Richard A Schnurr

Rick Schnurr 745.2

Timothy D Gruner

Tim Gruner 745.2

David Everett 12/13/93

Dave Everett 743.1

Ron Kolecki 12/3/93

Ron Kolecki 303.0

MUE Flight Power distribution

This procedure is intended to characterize and initialize the magnetic properties of a FAST MUE electronics board assembly.

Call Quality Assurance before starting procedure. Verify RBS

Set up ESD station in Mag Cal Facility. Verify RBS

Place printed wiring board on measurement stand. Verify RBS → Remove connector savers RBS

Measure Magnetic properties of Card. 2 gamma / Meter Field North Verify RBS

Degause Card. 30 g Verify RBS

Measure Magnetic properties of Card. 2 gamma / Meter Field North Verify RBS

Apply a ~~one~~ three gauss feild to the card. 0.2 gamma shift Verify RBS

Measure Magnetic properties of Card. Verify RBS

Degause Card. 30 g Verify RBS

Measure Magnetic properties of Card. Verify ____ → Delete

Repack Card in ESD container. Verify RBS

Top of Box North
card up

FAST MUE PCU PCU/3 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION DISTANCE (M)
FAST DEPERM PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	3.1	.1	-2.5	2.0	.5	-1.2	1.4	.3	.1
10	3.7	.1	-2.9	2.6	.5	-1.3	1.2	.4	-1.1
20	4.1	.5	-2.4	2.4	.3	.2	1.1	.3	-.9
30	5.3	0.0	-1.9	2.1	.2	0.0	1.3	.3	.1
40	4.5	-.2	-2.4	2.2	.5	-.6	1.2	.6	-.1
50	5.1	0.0	-2.5	1.7	.3	-.4	1.1	.4	.5
60	4.7	.3	-1.3	1.7	.8	-1.1	1.0	.6	-.5
70	4.8	1.2	-.8	1.5	.6	-.7	.9	.6	-.9
80	4.3	1.7	-1.9	1.5	1.6	-.3	1.1	.6	-.9
90	4.7	2.4	-1.6	1.7	1.2	0.0	1.0	.6	-.6
100	3.9	4.0	-1.3	1.3	2.1	.2	.7	.8	-1.2
110	2.5	4.6	-1.7	.6	1.6	-1.6	.5	.9	-.8
120	.6	6.2	-2.1	.4	2.1	-1.0	-.2	1.1	-.2
130	-2.3	7.4	-3.2	-.8	2.1	-.9	-.5	1.0	.1
140	-5.8	9.1	-2.3	-1.4	2.3	-.5	-.8	1.0	-1.6
150	-10.1	10.5	-2.4	-2.3	2.5	-1.4	-1.2	1.2	-.9
160	-15.4	11.4	-4.1	-3.3	2.4	-.6	-1.4	1.1	-.7
170	-21.9	11.6	-4.2	-5.0	2.1	-.9	-1.9	.9	-1.1
180	-27.6	9.9	-6.2	-5.6	1.7	-1.2	-2.2	.7	-.4
190	-32.5	6.1	-7.3	-6.6	.5	-1.0	-2.2	.1	.1
200	-34.5	.2	-8.0	-7.0	-.7	-1.4	-2.0	-.1	-1.0
210	-32.0	-6.6	-7.5	-6.3	-2.0	-.9	-1.9	-.8	-1.2
220	-25.2	-13.9	-6.9	-5.8	-2.7	-.9	-1.8	-1.0	-.6
230	-14.9	-18.4	-6.3	-4.6	-3.4	-1.1	-1.3	-1.3	-.4
240	-3.3	-19.8	-7.3	-2.5	-3.8	-1.1	-.6	-1.4	-.6
250	5.9	-17.5	-5.9	-.8	-3.9	-1.7	-.1	-1.3	-1.0
260	12.1	-13.6	-4.8	.5	-2.7	-.6	.7	-1.1	-.6
270	15.0	-8.7	-3.0	2.2	-2.5	-.7	.8	-.8	.1
280	14.7	-3.9	-3.9	3.1	-1.4	-2.0	1.2	-.9	-1.0
290	13.2	-.8	-2.5	3.4	-1.3	-1.4	1.2	-.4	-.9
300	10.7	1.4	-2.8	3.4	-.6	-1.5	1.4	-.4	-.5
310	7.7	2.0	-2.8	3.2	-.3	-1.6	1.4	-.2	-.7
320	5.8	1.9	-4.0	2.8	.1	-1.4	1.4	-.1	-.6
330	4.6	1.8	-4.4	2.6	.2	-1.4	1.3	-.1	.3
340	3.6	1.6	-3.3	2.1	.4	.1	1.1	0.0	-.9
350	3.3	1.0	-2.4	2.0	.4	-1.5	1.1	0.0	-.5

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
8.8	-.0	4.5	9.9

FAST MUE PCU PCU/2 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION
POST 3G EXPOSURE

DISTANCE (M)
PROBE 1= .5 : PROBE2= .75 : PROBE 2= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	3.3	.1	-2.6	1.9	.3	-1.0	1.1	-.2	-.2
10	4.1	.2	-2.9	2.0	.1	-.8	.9	-.2	-.2
20	4.3	-.3	-2.6	2.2	.2	-1.0	1.0	-.1	-.3
30	4.5	.4	-2.5	1.9	.2	-1.4	.9	.1	-.4
40	5.1	-.5	-2.2	2.6	.2	-.7	.9	.1	.5
50	5.2	.1	-4.0	1.7	.5	-.4	.9	.1	-.4
60	5.0	.7	-.8	2.0	.6	-.5	.6	.1	-.7
70	4.6	1.1	-1.4	1.2	.6	-.7	.6	-.2	-.1
80	3.9	1.9	-1.8	1.1	.8	-1.2	.5	.1	-.8
90	3.7	2.8	-2.5	1.3	1.1	-.9	.3	.2	0.0
00	2.6	4.0	-1.3	1.1	1.5	-1.0	.1	.3	0.0
110	1.6	4.8	-1.3	.2	1.7	-1.8	-.1	.5	-.7
120	-.4	6.2	-2.8	.1	2.0	-1.3	-.5	.7	-1.1
130	-3.0	7.7	-2.7	-1.3	2.2	-1.7	-.8	.8	-.5
140	-7.0	9.2	-2.7	-1.6	2.4	-1.0	-1.0	.9	-.9
150	-11.4	10.5	-3.6	-3.1	2.4	.3	-1.5	.9	-.7
160	-16.9	11.0	-4.7	-3.9	2.5	.1	-2.0	.6	-.9
170	-23.1	11.5	-4.4	-5.6	2.2	-1.2	-2.3	.4	-.6
180	-29.4	9.8	-5.6	-6.2	1.4	-.9	-2.6	.1	-.6
190	-34.0	6.6	-7.6	-7.5	.8	-1.7	-2.8	-.2	-1.0
200	-35.7	.1	-7.4	-7.3	-.6	-1.5	-2.8	-.7	-.6
210	-33.6	-6.8	-7.6	-7.5	-2.2	-1.4	-2.4	-1.1	-1.2
220	-26.7	-14.2	-7.8	-6.7	-2.7	-2.0	-2.1	-1.3	-.9
230	-16.0	-18.6	-8.3	-5.1	-3.2	-.6	-1.6	-1.8	-1.6
240	-4.6	-20.4	-6.7	-2.9	-4.2	-1.3	-.9	-1.8	-1.5
250	5.2	-18.3	-6.6	-1.0	-4.0	-1.9	-.1	-1.7	0.0
260	11.5	-14.3	-4.4	.3	-3.5	-1.5	.4	-1.6	-.6
270	14.6	-9.5	-3.4	2.1	-2.7	-.8	.7	-1.4	-1.2
280	15.1	-4.9	-4.4	2.4	-1.8	-1.4	1.0	-1.2	-.7
290	13.5	-1.0	-3.7	3.2	-1.3	-.5	1.2	-1.0	-.4
300	10.6	.8	-2.7	3.3	-.4	-1.8	1.1	-.9	-.6
310	8.1	1.9	-2.6	3.1	-.3	-1.4	1.3	-.4	-.9
320	6.4	1.5	-3.1	3.2	-.3	-.7	1.2	-.3	-1.3
330	4.6	1.3	-4.7	2.9	.6	-1.6	1.2	-.1	-1.1
340	3.6	1.3	-4.4	2.4	.2	-2.0	1.1	-.1	-.9
350	3.6	.9	-4.1	2.2	.2	-1.9	1.0	-.1	-.5

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
9.4	-.1	4.9	10.6

FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE

EMP Plate

Richard A Schnurr

Rick Schnurr 745.2

Timothy D Gruner

Tim Gruner 745.2

David Everett 12/13/93

Dave Everett 743.1

R. Kolecki 12/3/93

Ron Kolecki 303.0

MUE Flight end plate with shield

This procedure is intended to characterize and initialize the magnetic properties of a FAST MUE electronics board assembly.

Call Quality Assurance before starting procedure.	Verify RLJ
Set up ESD station in Mag Cal Facility.	Verify RLJ
Place printed wiring board on measurement stand.	Verify_____
Measure Magnetic properties of Card.	Verify_____
Degause Card.	Verify_____
Measure Magnetic properties of Card.	Verify RLJ
Apply a ~~one~~ three gauss feild to the card.	Verify RLJ
Measure Magnetic properties of Card.	Verify RLJ
Degause Card.	Verify RLJ
Measure Magnetic properties of Card.	Verify_____
Repack Card in ESD container.	Verify RLJ

already done Degaused Shield

Skip

FAST MUE END PLATE W/SHIELD END/3.1 DATE:12/13/93

M~~NETIZATION

PROBE DISTANCE IN METERS

MAGNETIZATION
POST DEPERM

DISTANCE (M)
PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	.4	-7.1	-1.1	-2.3	-.6	-.9	-.9	-.1	.7
10	2.3	-3.6	-.2	-1.7	-.4	-.3	-.8	-.2	-.1
20	1.6	-.1	-.8	-1.5	.2	-2.0	-.7	0.0	.1
30	-1.4	4.7	-.4	-2.2	.9	-1.6	-.8	0.0	.1
40	-5.7	6.4	-1.6	-2.6	.8	-1.7	-1.1	.1	.8
50	-10.7	7.6	-1.6	-3.3	1.2	-.9	-1.2	.2	.5
60	-16.4	7.0	-2.2	-4.1	.5	-2.3	-1.3	-.2	.3
70	-21.0	4.2	-3.2	-4.6	-.6	-1.3	-1.3	-.5	-.3
80	-23.2	-.1	-2.5	-5.2	-1.4	-2.5	-1.3	-.7	.4
90	-22.6	-6.4	-4.2	-5.1	-1.9	-1.5	-.9	-1.2	.4
100	-17.5	-13.8	-3.2	-4.1	-4.3	-.9	-.5	-1.4	.6
110	-9.4	-20.7	-3.7	-2.1	-5.3	-1.4	.6	-1.8	.9
120	3.4	-26.6	-1.3	.3	-5.6	-1.8	1.3	-1.9	.6
130	18.6	-29.7	-.4	2.4	-5.7	-2.0	2.2	-1.9	.9
140	35.0	-29.1	1.6	5.8	-5.3	-.1	3.1	-1.7	1.0
150	48.2	-23.1	2.8	8.0	-3.9	-1.3	3.7	-1.2	1.8
160	55.5	-11.8	3.1	9.5	-1.9	.2	3.8	-.5	.1
170	53.6	3.3	3.0	10.5	.4	-1.3	3.7	-.1	1.3
180	40.4	18.5	1.8	9.1	2.8	-1.2	3.3	.5	-.3
190	19.0	29.3	.7	7.1	4.0	-1.3	2.5	.9	.1
200	-3.4	30.2	-1.7	4.2	4.5	-2.5	1.9	1.1	.6
210	-19.4	22.4	-5.2	1.6	3.6	-1.9	1.3	1.2	-.4
220	-22.5	7.7	-7.3	0.0	2.6	-1.6	.8	1.0	.7
230	-14.1	-5.5	-6.6	-.6	1.2	-2.0	.6	.8	.8
240	.2	-11.4	-3.7	-.8	.8	-1.2	.7	.7	.3
250	10.6	-7.8	-2.1	.7	1.0	-1.6	.3	.7	.7
260	12.0	2.1	-.7	.3	1.7	-2.2	.1	.9	.4
270	4.6	12.2	-2.0	-.6	2.4	-1.5	-.4	1.0	.9
280	-7.3	17.2	-.5	-1.8	2.7	-.9	-.9	1.0	.4
290	-18.6	16.8	-1.9	-2.8	2.7	-1.2	-1.2	.9	-.6
300	-26.6	11.9	-2.9	-4.6	2.2	-.9	-1.7	1.0	.6
310	-28.5	4.1	-3.9	-5.2	1.0	-.8	-1.9	.6	.3
320	-25.3	-3.5	-3.5	-6.1	-.4	-.2	-1.9	.4	.2
330	-19.2	-8.4	-3.7	-5.2	-.8	-1.3	-1.8	.1	1.3
340	-11.4	-9.9	-3.8	-4.0	-1.3	-1.2	-1.6	0.0	.8
350	-4.8	-9.5	-1.8	-3.6	-1.2	-.5	-1.5	0.0	.9

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
-11.0	2.7	2.2	11.5

FAST MUE END PLATE W/SHIELD END/2.1 DATE:12/13/93

MAGNETIZATION

PROBE DISTANCE IN METERS

MAGNETIZATION
POST 3G EXPOSURE

DISTANCE (M)
PROBE 1= .5 : PROBE2= .75 : PROBE 2= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	.8	-6.7	-1.7	-2.1	-.6	-.5	-1.2	-.4	-.4
10	2.6	-3.0	0.0	-2.2	0.0	.2	-1.1	-.3	-.9
20	2.2	.8	0.0	-1.7	-.2	.3	-1.2	-.4	-.3
30	-.7	4.2	.2	-1.9	.5	-.4	-1.3	-.3	.3
40	-5.2	6.8	.4	-2.6	1.0	-.7	-1.5	-.2	.3
50	-10.6	8.0	-2.3	-3.6	.7	-.8	-1.7	-.2	-.6
60	-16.3	7.5	-2.0	-4.2	.4	-.3	-1.8	-.4	-.3
70	-21.2	4.6	-2.3	-5.2	-.4	-1.1	-1.9	-.8	-1.1
80	-23.0	.3	-1.5	-5.0	-1.2	-.9	-1.7	-1.0	.1
90	-22.1	-6.0	-4.5	-4.9	-2.6	.7	-1.4	-1.3	-.2
100	-18.2	-13.0	-2.9	-4.1	-3.6	.1	-.9	-1.6	-.8
110	-9.6	-20.2	-2.7	-2.8	-5.1	-1.9	-.1	-2.0	.1
120	2.9	-26.3	-1.1	-.3	-5.7	.3	.8	-2.1	-.1
130	18.0	-29.6	1.5	2.3	-5.8	.7	1.6	-2.0	-.2
140	34.5	-28.2	2.1	5.4	-5.2	.9	2.3	-1.8	-.1
150	47.7	-22.3	2.8	7.8	-3.4	.6	2.9	-1.3	.6
60	54.9	-10.6	5.5	9.5	-1.5	-.3	3.2	-.7	.6
170	52.0	4.9	4.2	9.8	.9	-1.3	3.1	-.2	-.4
180	38.4	19.7	3.3	8.5	3.0	-1.2	2.8	.4	.6
190	16.1	29.5	1.0	6.9	4.3	-1.1	1.9	.7	.1
200	-6.3	30.5	-2.8	3.7	4.1	-.5	1.3	.9	-.4
210	-21.2	20.9	-3.0	1.3	3.6	-2.7	.8	.8	-1.4
220	-23.9	7.1	-6.6	-.6	2.1	-1.4	.4	.8	-1.0
230	-15.0	-6.5	-6.2	-1.0	1.2	-.6	.1	.7	.5
240	-.5	-11.9	-4.2	-.8	.3	.2	-.1	.5	-.5
250	9.7	-7.7	-.9	-.2	.9	-1.5	0.0	.4	-.1
260	11.5	2.1	-.3	.1	1.5	-1.8	-.2	.5	-.4
270	4.7	11.6	-.4	-.4	2.4	-.3	-.6	.6	-.1
280	-7.4	17.0	-.3	-1.5	2.5	-2.6	-1.0	.6	-.8
290	-19.0	16.1	-.9	-2.5	2.7	-.8	-1.5	.8	.8
300	-25.9	10.7	-2.2	-4.3	1.9	-.2	-1.6	.4	-.6
310	-27.0	3.3	-3.8	-5.0	.9	-1.0	-1.9	.1	-1.2
320	-24.2	-4.4	-3.8	-5.4	-.2	.4	-1.9	-.2	.2
330	-17.8	-8.2	-4.3	-4.6	-.8	-1.2	-1.6	-.3	.3
340	-10.2	-10.0	-1.3	-3.8	-1.2	-.5	-1.6	-.5	.4
350	-3.7	-9.5	-2.4	-3.3	-1.1	-.5	-1.5	-.5	.6

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
-10.2	2.7	1.4	10.7

FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE
Flight END Plate

Richard Schnurr
Rick Schnurr 745.2

Tim Gruner 745.2

Dave Everett 12/13/93
Dave Everettt 743.1

Ron Kolecki 12/3/93
Ron Kolecki 303.0

MUE Flight end plate

This procedure is intended to characterize and initialize the magnetic properties of a FAST MUE electronics board assembly.

Call Quality Assurance before starting procedure.	Verify RbS
Set up ESD station in Mag Cal Facility.	Verify RbS → Removed connector savers RbS
Place printed wiring board on measurement stand.	Verify RbS
Measure Magnetic properties of Card. 1M 6.2 gamma	Verify RbS
Degause Card. 30 gauss X into a little Y	Verify RbS
Measure Magnetic properties of Card. 1M 6.2 gamma	Verify RbS
Apply a ~~one~~ three gauss feild to the card.	Verify RbS
Measure Magnetic properties of Card. 1M 6.0 gamma	Verify RbS
Degause Card.	Verify RbS
Measure Magnetic properties of Card.	Verify ____
Repack Card in ESD container.	Verify RbS

Top of Box north

Card UP

FAST MUE END PLATE END/1 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION DISTANCE (M)
INITIAL PERM PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	35.9	10.3	3.5	10.3	4.4	1.0	4.1	2.1	.6
10	30.9	15.3	3.8	8.7	5.8	.6	3.2	2.5	-.1
20	24.2	20.7	2.0	7.6	6.7	0.0	2.4	3.0	.7
30	15.3	25.8	2.2	4.9	7.8	.1	1.4	3.1	.1
40	3.2	28.8	1.2	2.2	7.9	.4	-.1	3.3	.6
50	-8.5	30.3	.6	-1.0	8.0	.8	-1.2	3.3	-.2
60	-21.6	29.7	-1.6	-4.3	8.0	-.2	-2.6	3.2	.4
70	-32.7	27.3	-3.2	-7.4	7.1	-.3	-3.5	3.0	-.5
80	-41.9	23.0	-3.5	-9.9	6.7	-.2	-4.5	2.4	-.3
90	-48.2	15.9	-5.0	-12.1	4.5	.3	-5.3	1.8	.2
100	-51.2	8.4	-4.7	-14.0	2.6	-.7	-5.6	1.3	-.4
110	-48.6	.1	-5.4	-14.4	1.3	-.3	-5.5	.5	-.3
120	-42.9	-8.2	-4.4	-13.7	-.8	-.1	-5.7	-.2	-.3
130	-32.7	-14.0	-3.8	-12.7	-2.4	-.1	-5.1	-.7	-.6
140	-21.2	-16.9	-2.7	-10.8	-2.3	.7	-4.8	-.9	-.2
150	-11.3	-14.8	-1.6	-9.2	-1.9	0.0	-4.4	-.9	.2
160	-6.8	-8.5	-.2	-8.8	-2.0	.6	-3.9	-.8	-.4
170	-8.1	-.3	-.8	-7.6	-1.9	.3	-3.7	-1.2	-.1
180	-18.4	8.0	-1.8	-7.9	-1.4	-1.1	-3.5	-1.4	.1
190	-33.7	10.8	-2.4	-8.9	-1.9	-1.6	-3.1	-1.8	.3
200	-46.4	4.8	-5.7	-9.0	-3.7	-1.6	-2.8	-2.3	-.4
210	-50.0	-10.2	-6.6	-8.8	-5.7	-.5	-1.9	-2.9	-.6
220	-37.8	-28.6	-7.2	-7.1	-7.4	.2	-1.0	-3.3	.1
230	-13.7	-44.6	-4.7	-3.5	-9.4	-.2	.6	-3.8	-.5
240	16.4	-49.2	-1.6	.3	-9.8	-.3	2.0	-3.6	.6
250	39.9	-42.9	1.4	4.9	-8.7	1.5	3.3	-3.4	.2
260	52.7	-29.2	3.9	8.7	-6.8	.8	4.4	-2.8	.4
270	55.3	-13.9	6.1	11.8	-5.2	1.8	5.2	-2.2	.5
280	48.5	-2.9	5.6	12.1	-3.0	1.2	5.5	-1.5	.9
290	41.5	3.6	5.4	12.8	-1.4	2.0	5.8	-1.0	.6
300	34.9	4.3	3.3	13.0	-.7	2.1	5.9	-.4	1.0
310	32.0	2.8	5.2	12.4	.2	.1	6.2	-.1	-.3
320	31.9	.3	3.2	12.2	1.0	.8	5.9	.3	.8
330	34.1	-.2	1.6	11.9	1.3	1.3	5.6	.7	1.0
340	36.4	1.5	1.7	11.9	2.0	.2	5.3	1.2	1.1
350	36.8	5.5	1.0	11.0	4.0	.5	4.8	1.6	1.1

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
17.8	-20.0	.7	26.8

FAST MUE END PLATE END/3 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION
POST DEPERM

DISTANCE (M)
PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	35.3	10.2	4.2	11.9	4.3	-.7	4.5	2.0	.6
10	30.4	15.2	2.9	9.8	5.4	-.3	3.6	2.5	.5
20	23.5	20.6	3.1	8.1	6.9	.1	2.5	2.9	.6
30	14.4	25.4	2.5	5.7	7.1	-.7	1.4	3.2	-.3
40	2.8	28.6	1.4	2.3	7.9	-1.2	.1	3.2	.4
50	-10.3	30.0	-.5	-1.1	8.0	-1.3	-1.7	3.2	-.2
60	-22.1	29.7	-1.6	-3.6	8.3	-.8	-2.8	3.3	-.3
70	-33.2	27.3	-3.0	-6.6	7.2	-.7	-4.1	3.0	-.2
80	-42.6	23.1	-3.5	-9.6	5.9	-1.9	-4.8	2.5	-.6
90	-48.7	15.7	-5.0	-11.6	4.8	-.8	-5.7	1.8	-.5
100	-51.3	7.7	-5.0	-12.9	2.4	-1.3	-6.0	1.3	.2
110	-49.3	-.3	-5.2	-13.1	1.6	-1.6	-6.2	.8	-.1
120	-42.9	-8.3	-4.5	-13.6	-.8	-1.7	-6.1	.1	-.6
130	-33.3	-14.4	-3.4	-12.2	-1.5	-1.4	-5.4	-.4	-.9
140	-21.8	-16.9	-4.0	-10.7	-3.1	-.3	-5.2	-.8	-.5
150	-11.4	-15.8	-1.7	-8.9	-2.7	-1.0	-4.6	-1.1	-.5
160	-5.9	-9.8	-1.1	-7.5	-2.6	-.7	-4.3	-1.2	.2
170	-7.2	-.5	-1.1	-7.1	-1.3	-.6	-4.0	-1.3	-.3
180	-17.0	7.2	-2.4	-7.1	-1.5	-1.4	-3.7	-1.4	-.2
190	-31.5	9.7	-3.5	-7.5	-1.7	-2.1	-3.4	-1.6	-.2
200	-43.8	4.3	-6.1	-8.1	-3.6	-2.4	-3.1	-1.9	.5
210	-47.4	-10.0	-6.6	-7.6	-5.3	-.7	-2.3	-2.5	-.7
220	-35.6	-28.2	-6.7	-5.6	-7.5	-1.2	-1.2	-3.0	-.4
230	-12.2	-42.8	-5.8	-2.6	-8.5	-1.2	.2	-3.4	.2
240	16.6	-47.6	-2.8	1.7	-9.4	.1	1.4	-3.5	-.2
250	39.8	-41.8	1.5	5.3	-8.4	-.4	2.9	-3.2	-.4
260	52.0	-27.5	2.7	9.4	-6.7	-.4	3.9	-2.6	.4
270	54.0	-12.8	5.0	11.5	-4.6	.6	4.8	-1.9	.9
280	47.8	-1.8	6.3	13.4	-3.0	.1	5.1	-1.2	.5
290	39.1	4.1	5.4	12.6	-1.1	-.8	5.4	-.7	1.0
300	32.5	5.1	3.8	12.8	-.2	-1.6	5.4	-.1	.1
310	29.7	2.6	4.7	12.2	.1	-.4	5.4	.1	-.4
320	30.2	.9	1.5	12.1	1.4	-.5	5.4	.4	.2
330	32.7	.7	2.6	12.2	1.9	-.9	4.9	.7	.7
340	34.8	1.6	3.0	11.6	2.2	-.8	4.7	1.1	.2
350	36.0	5.5	3.7	11.9	3.5	-.7	4.2	1.8	.3

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
17.0	-20.0	.5	26.2

FAST MUE END PLATE END/2 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION
POST 3G EXPOSURE

DISTANCE (M)
PROBE 1= .5 : PROBE2= .75 : PROBE 2= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	-	DATA SCANS							
0	35.8	10.4	2.2	10.1	4.6	-.3	4.0	2.0	.8
10	31.9	14.7	2.5	9.0	5.1	1.3	3.3	2.4	-.6
20	24.5	20.1	1.8	7.9	6.1	.1	2.3	2.8	0.0
30	16.0	25.6	.8	6.1	7.3	.5	1.2	3.3	-.2
40	4.5	28.2	.5	2.8	7.7	.2	-.2	3.3	-.3
50	-8.4	30.1	-1.5	-.8	8.1	-.2	-1.3	3.2	-.2
60	-20.1	30.1	-2.0	-3.9	8.1	.7	-2.5	3.1	-.2
70	-31.8	27.7	-3.7	-6.3	7.4	.5	-3.6	2.9	-.3
80	-41.8	23.4	-5.2	-10.3	6.6	.2	-4.4	2.4	-.1
90	-49.1	16.0	-5.6	-12.3	4.8	-.3	-5.3	1.8	-.9
100	-50.0	8.2	-6.6	-12.7	2.5	-.7	-5.7	1.3	-.3
110	-49.2	.9	-7.0	-13.7	1.3	-.5	-5.7	.6	-.5
120	-43.7	-7.7	-7.2	-14.3	-.5	-.6	-5.6	0.0	-1.0
130	-32.9	-14.4	-4.2	-12.1	-2.3	.3	-5.4	-.3	-.8
140	-21.5	-17.3	-3.7	-10.4	-2.8	.1	-4.9	-1.0	-1.3
150	-11.2	-15.7	-2.8	-9.0	-2.7	.3	-4.5	-1.0	-1.0
160	-5.1	-9.5	-.9	-8.3	-2.3	-1.3	-4.0	-1.1	-.4
170	-8.4	-.6	-3.4	-7.7	-1.8	.2	-3.5	-1.3	-.8
180	-17.8	7.7	-4.0	-8.1	-1.5	-.3	-3.4	-1.3	-.8
190	-32.3	10.3	-5.6	-8.0	-2.1	-.6	-3.4	-1.6	.1
200	-44.9	4.6	-6.8	-8.9	-3.5	-.5	-2.7	-2.0	-.3
210	-47.2	-10.7	-8.3	-8.0	-5.6	1.5	-2.1	-2.5	-.6
220	-35.8	-28.6	-8.5	-6.3	-7.8	-.8	-1.1	-2.9	.4
230	-12.4	-43.7	-6.7	-3.4	-9.1	.4	.3	-3.4	-.2
240	16.2	-48.4	-2.7	2.0	-9.7	-1.4	1.7	-3.6	-.2
250	40.5	-41.7	-.4	5.4	-8.6	.1	3.3	-3.3	.2
260	52.4	-28.5	2.4	9.4	-6.5	.8	4.6	-2.7	-.8
270	54.0	-13.7	4.1	11.6	-4.7	-.8	5.1	-2.0	-.8
280	48.6	-3.0	4.8	12.8	-3.1	.3	5.5	-1.4	-.2
290	40.4	3.3	2.9	13.0	-1.4	2.5	5.6	-.8	.7
300	34.1	4.1	3.4	12.7	-.5	1.2	5.8	-.5	0.0
310	31.2	2.2	2.1	12.1	.2	1.1	5.6	0.0	0.0
320	32.3	.3	1.7	12.4	.6	1.6	5.6	.4	-.2
330	33.8	-.1	1.1	12.0	1.2	.6	5.4	.7	.1
340	35.9	1.5	2.3	11.9	1.9	.3	5.1	1.3	-.4
350	37.2	5.0	1.4	11.4	3.3	1.6	4.7	1.6	.7

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
17.6	-19.9	2.4	26.7

FAST-PROC-067

SMEX FAST MUE BOARD
MAGNETICS PROCEDURE
Flight Bcc

Richard A Schnurr

Rick Schnurr 745.2

Tim Gruner 745.2

David Everett 12/13/93

Dave Everettt 743.1

R. Kolecki 12/3/93

Ron Kolecki 303.0

MUE Flight BCC Battery charge control

This procedure is intended to characterize and initialize the magnetic properties of a FAST MUE electronics board assembly.

Call Quality Assurance before starting procedure.	Verify RBS
Set up ESD station in Mag Cal Facility.	Verify RBS
Place printed wiring board on measurement stand.	Verify RBJ → Remove connector saver. RBS
Measure Magnetic properties of Card.	Verify RBJ
Degause Card. 30 gauss	Verify RBJ
Measure Magnetic properties of Card.	Verify RBJ
Apply a ~~one~~ three gauss feild to the card. in X direction	Verify RBS
Measure Magnetic properties of Card.	Verify RBS
Degause Card. 30 gauss	Verify RBS
Measure Magnetic properties of Card.	Verify ____ skipped
Repack Card in ESD container.	Verify RBS

Top of Box North (X)

card up

FAST MUE BCC BCC/1 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

M~NETIZATION DISTANCE (M)
l..TIAL PERM PROBE 1= 1 : PROBE 2= 1.25 : PROBE 3= 1.5

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	-.3	-.5	-.2	-.3	-.3	-.0	.1	-.3	.2
10	0.0	-.5	-.3	.1	.1	.1	-.1	-.4	.2
20	-.5	-.1	-.4	-.4	-.5	-.0	-.1	-.3	.1
30	-.3	-.3	-.4	.2	-.2	.1	-.1	-.3	.2
40	-.2	-.6	-.3	-.3	-.3	.1	-.1	0.0	.2
50	-.4	.1	-.3	.1	-.4	-.1	-.1	0.0	.1
60	0.0	-.5	-.3	.4	-.2	.0	-.1	-.1	.2
70	-.6	-.3	-.1	.1	-.4	.3	-.3	-.2	.2
80	.1	.1	-.3	.3	.1	.1	-.1	-.2	.1
90	-.2	-.3	-.4	.1	-.1	.0	-.1	-.2	.1
100	-.4	-.5	-.3	-.1	-.3	-.0	-.1	-.2	.1
110	-.2	-.5	-.4	.2	-.3	-.0	-.2	-.1	.1
120	-.2	-.6	-.4	-.1	-.4	.0	-.2	-.1	.1
130	-.2	-.4	-.4	.2	-.3	.0	-.2	-.2	.1
140	.1	-.5	-.3	-.2	-.3	.0	-.1	-.2	.1
150	0.0	-.4	-.4	.5	-.2	-.0	-.1	-.2	.1
160	-.1	-.4	-.3	.2	-.4	.0	.1	-.3	.1
~70	-.1	-.4	-.3	.4	-.3	.1	-.1	-.2	.2
180	0.0	-.3	-.4	.3	-.2	-.1	-.2	0.0	.1
190	-.2	-.5	-.3	.5	-.4	-.1	-.1	-.1	.1
200	.1	-.6	-.5	.4	-.5	-.1	-.1	-.1	.1
210	.2	-.5	-.4	.6	-.4	.1	.1	-.1	.1
220	0.0	.2	-.3	.4	.3	.1	.1	-.2	.1
230	.1	-.4	-.3	.5	-.3	.0	.1	-.2	.2
240	-.2	-.2	-.3	-.1	-.4	.0	.1	-.1	.1
250	-.3	-.4	-.3	-.1	-.3	-.0	-.2	0.0	.1
260	-.5	-.4	-.2	-.3	-.3	.0	-.1	-.2	.2
270	-.2	-.4	-.4	.1	-.2	.1	-.3	-.1	.2
280	-.5	-.2	-.3	.1	-.2	-.0	.1	-.1	.3
290	-.4	-.1	-.2	.1	-.2	.0	-.1	-.2	.1
300	-.4	-.1	-.1	-.1	.2	.1	-.2	-.2	.2
310	-.3	-.3	-.2	.1	-.2	-.1	-.1	-.1	.1
320	.1	-.8	-.4	.4	.1	.0	-.2	-.2	.2
330	0.0	.1	-.2	-.1	-.5	-.1	-.1	-.1	-.0
340	-.3	-.3	-.1	-.2	-.4	.1	.1	-.3	.2
350	.2	-.4	-.2	.4	-.5	.0	-.1	-.1	.1

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
-.5	-.0	[redacted]9.5	[redacted]9.5

FAST MUE BCC BCC/3 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION DISTANCE (M)
POST DEPERM PROBE 1= .5 : PROBE 2= .75 : PROBE 3= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	.6	.1	-5.2	-.8	.1	-.9	-.7	.1	.0
10	-.2	.2	-5.0	-.5	.3	-.2	-.3	.1	-.2
20	.3	-.3	-5.4	-.6	-.4	-.9	-.6	.1	-.2
30	-.3	-.1	-5.3	-.6	.7	-1.4	-.8	0.0	-.1
40	-.4	-.2	-5.6	-.2	.2	-.7	-.4	-.1	.0
50	-.7	.2	-5.5	-.8	-.2	-.8	-.6	-.1	-.3
60	.6	.3	-5.9	-.2	-.4	-1.4	-.6	.1	-.3
70	.2	0.0	-5.6	.2	.1	-.8	-.6	.1	-.1
80	.3	-.4	-7.5	-.6	.1	-1.0	-.6	0.0	-.2
90	.1	-.2	-7.1	-.7	0.0	-1.2	-.7	-.1	-.1
100	.6	0.0	-7.3	-.3	-.6	-1.0	-.9	-.3	-.1
110	-.6	.1	-7.0	-.9	-.1	-.4	-.7	-.1	-.3
120	-.2	-.2	-8.0	-.7	-.4	-1.0	-.8	0.0	-.0
130	-.2	-.1	-5.6	-.2	-.5	-.8	-.6	-.2	.0
140	-1.2	-.4	-7.7	-.9	.3	-1.1	-.6	-.2	-.2
150	-.9	-.1	-7.1	-.7	.2	-1.6	-.6	-.1	-.3
160	-.4	-1.0	-5.9	.1	-.2	-.5	-.6	0.0	-.4
170	-.3	-.6	-6.0	-.4	-.3	-.5	-.7	.1	-.2
180	.6	-.9	-5.1	-.3	-.3	-.4	-.6	-.2	-.2
190	.7	-.7	-5.8	-.3	-.3	-.1	-.6	0.0	-.4
200	1.0	-.9	-4.4	-.2	-.2	-.8	-.6	-.2	-.0
210	-.1	-.6	-4.0	-1.1	0.0	-1.2	-.3	-.2	-.3
220	.9	-1.3	-4.0	-.3	-.3	-.4	-.4	-.3	-.2
230	1.7	-.5	-3.3	.5	-.4	-.4	-.6	-.1	-.2
240	.4	-.1	-3.7	-.4	.2	-.3	-.3	-.4	-.0
250	1.7	-.4	-3.3	.3	-.5	-.2	-.5	-.2	-.1
260	1.2	-.3	-3.9	.4	.1	-.1	-.7	-.5	-.2
270	1.4	-.1	-3.1	.1	-.4	-.1	-.5	-.4	-.2
280	.3	1.1	-3.6	-.9	.2	-.4	-.5	-.3	-.1
290	1.1	-.5	-3.8	.3	-.4	-.1	-.6	-.4	-.2
300	1.7	.4	-1.9	.5	-.4	-.5	-.5	-.1	-.2
310	.9	0.0	-2.4	.6	-.3	-.7	-.6	-.2	-.2
320	-.1	0.0	-3.5	-.3	.5	-1.3	-.7	0.0	-.1
330	-.3	-.1	-4.5	-.2	.4	-1.2	-.5	-.1	-.3
340	-.6	.5	-4.7	-1.5	.1	-.9	-.5	-.1	-.1
350	.2	-.1	-3.2	-.3	-.4	-.8	-.7	.1	-.2

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
-.0	-.4	6.2	6.2

FAST MUE BCC BCC/2 DATE:12/13/93

MAGNETIZATION PROBE DISTANCE IN METERS

MAGNETIZATION DISTANCE (M)
PUST 3G EXPOSURE PROBE 1= .5 : PROBE2= .75 : PROBE 2= 1

MAGNETIC FIELD IN NANOTESLA

BKGS	X1	Y1	Z1	X2	Y2	Z2	X3	Y3	Z3
ANGLE	- DATA SCANS								
0	1.4	-.3	-5.5	-.4	-.1	-.7	.5	-.3	-.3
10	.7	.4	-5.6	.4	-.3	-.3	.3	-.2	-.2
20	1.1	.3	-4.6	0.0	.1	-.7	.3	-.2	-.4
30	.5	.2	-4.3	-.1	.1	-.3	.2	-.3	-.3
40	.5	.4	-5.6	-.3	-.2	-1.6	.3	-.2	-.2
50	.9	.3	-5.8	-.6	0.0	-1.1	.2	-.1	-.1
60	.9	0.0	-6.1	1.1	0.0	-.7	.5	-.1	-.0
70	1.1	.4	-7.0	0.0	-.2	-.9	-.1	0.0	-.2
80	.6	-.1	-7.6	-.4	.2	-.6	.1	-.1	-.3
90	1.1	-.3	-7.9	1.3	-.1	-.5	.4	.2	-.2
100	1.4	.4	-8.8	.3	-.2	-.8	.2	.2	-.2
110	-.4	.2	-8.4	-.1	.2	-.3	.3	.1	-.1
120	-.8	.3	-9.1	-.8	.4	-.6	.5	-.2	-.3
130	.4	-.7	-8.0	.8	-.6	-1.1	.3	-.1	-.1
140	.7	-.4	-7.4	-.1	-.2	-.6	-.5	-.1	-.1
150	-.5	.1	-7.1	-.9	-.5	-.4	.2	-.1	-.1
160	-.9	-1.0	-6.9	-.6	-.3	-.6	-.3	-.1	-.2
70	-.2	-1.0	-6.6	-.9	-.7	-.9	-.6	0.0	-.2
180	-.5	-.9	-6.8	-1.4	-.1	-.3	-.6	-.2	-.0
190	.9	-.7	-6.6	-.2	-.4	-.4	-.3	-.2	-.1
200	.5	-.7	-4.6	-.5	-.5	-.2	-.2	-.3	-.0
210	.5	-.9	-5.9	-.5	-.5	-.5	-.3	-.2	-.2
220	1.1	-.8	-4.5	-.6	-.4	-.1	-.3	-.3	-.1
230	.6	-.7	-4.8	.1	-.5	-.9	-.3	.1	-.1
240	1.2	-.7	-4.6	-.5	-.6	-.3	-.4	-.1	-.1
250	.8	-.5	-4.8	.2	-.6	-.2	-.4	-.1	-.2
260	1.3	-.9	-3.7	-.2	-.2	-.4	-.5	0.0	0.0
270	.5	-.2	-4.3	-.3	-.3	-.2	-.2	.1	-.1
280	0.0	-.3	-4.0	-.5	-.1	-.6	-.2	0.0	-.0
290	.8	-.6	-4.6	-.6	-.9	.1	-.1	0.0	-.2
300	1.0	-.7	-3.8	.3	-.5	-.2	-.3	0.0	-.1
310	1.4	-.7	-3.8	.3	-.9	-.1	-.2	-.1	-.2
320	.5	0.0	-4.1	-.9	-.2	-.7	-.3	-.1	-.1
330	-.4	-.4	-5.0	-.9	.4	-1.2	-.4	-.2	-.1
340	.5	.3	-4.5	-.8	-.3	-.5	-.2	0.0	-.2
350	.6	.6	-5.4	-.2	.4	-.6	-.4	0.0	-.1

DIPOLE MOMENTS IN GAUSS-CM^3

X	Y	Z	T
.2	-.1	7.4	7.4