

BIO- MAVS 3 Serial Number: 10210 Date: 2/4/13

Instrument type - MAVS3, REV 3 Board, 6000M pressure housing (titanium)

Communications - RS232

Program version - MAVS34_7.C

Memory - 128MB

Orientation - Vertical/Down

Sensors

Compass - Yes

Tilt - Yes

Pressure - No

Conductivity - No

Analog 1 - No

Analog 2 - No

Thermistor - Single or Bridge - Single(Internal)

Note: 2N2369A transistors installed in cascode circuit

Confirmed clean power bus.

Confirmed accurate sensor wiring.

Differential integrator, Nanosecond delay tare 7.25 ns

ns	Normal	Reverse	Net
0ns	4030	4048	FFE8
5ns	4200	3E68	0398
10ns	4410	3C58	07B8
15ns	4600	3A50	0BB0
20ns	4808	3858	0FB0
25ns	49F0	3678	1378
30ns	4C08	3470	1798
35ns	4DE0	3278	1B68
40ns	4FF0	3078	1F78
60ns	57E8	2880	2F68
80ns	5FC8	20B8	3F10
100ns	67B0	1898	4F18
120ns	6FB0	1090	5F20
140ns	7798	08A8	6EF0
160ns	7F90	0098	7EF8

Acoustics	Frequency 1.72 MHz	Power LOW	Schmitt trigger 220/10k	Trigger 64 mv
Axis	Transmit	Receive	Precursor	1 st cycle
A	24.4v p-p	3.16v p-p	32 mv	324 mv
B	24.4v p-p	2.40v p-p	28 mv	300 mv
C	24.4 v p-p	2.44v p-p	32 mv	304 mv
D	24.4v p-p	1.88v p-p	28 mv	236 mv

Velocity sensor s/n: 1187

Zeros 0001 0045 FFDC 0003

STD U=0.141, V=0.113, W=0.077

Compass: - heading rotation verified

Offsets: 4 -24 159

Scale terms: 1.000 0.758 0.917

Tilt - 1 second to stabilize. s/n 1116
 Ty scale= 0.02025, Ty tempco= 4.940
 Tx scale= 0.02058, Tx tempco= -0.325
 Tilt rotation verified
 Offsets: 9812 9882
 Angle Pitch Roll
 0 -0.1 -0.0

POWER CONSUMPTION:

12 volts
 Power LP Sleep - 0.3ma
 Power 2Hz Log - 25ma 0.5 Hz Log - 10ma
 15 volts
 Power 2Hz Log - 20ma
 7.7 volts - minimum voltage for correct operation
 Power 2Hz Log - 30 ma

Thermistor
 Offset = 0.0

Sample of data recovered from flash memory:

E	N	W	T	MX	MY	Pitch	Roll
cm/s	cm/s	cm/s	degC			deg	deg
-0.1	-0.2	0.0	16.14	0.88	-0.48	-11.5	-7.1
-0.2	-0.2	0.0	16.14	0.89	-0.47	-11.5	-7.1
-0.2	-0.0	0.1	16.14	0.88	-0.48	-11.4	-7.1
0.0	-0.1	-0.0	16.14	0.88	-0.47	-11.4	-7.1
0.1	-0.2	-0.0	16.17	0.88	-0.48	-11.5	-7.1
0.1	-0.2	-0.0	16.14	0.88	-0.47	-11.5	-7.1
0.1	-0.2	-0.1	16.14	0.88	-0.47	-11.4	-7.2
0.0	-0.1	-0.1	16.12	0.88	-0.48	-11.4	-7.2
0.0	-0.1	0.1	16.14	0.88	-0.48	-11.5	-7.1
0.1	-0.2	0.0	16.14	0.88	-0.47	-11.4	-7.2
0.1	-0.1	0.0	16.14	0.88	-0.47	-11.4	-7.1
0.1	-0.1	0.0	16.14	0.88	-0.47	-11.4	-7.2
-0.0	-0.2	0.0	16.14	0.88	-0.48	-11.4	-7.3
0.1	-0.1	0.1	16.14	0.88	-0.47	-11.4	-7.2
0.0	-0.0	0.1	16.14	0.88	-0.47	-11.4	-7.2
0.0	-0.0	0.2	16.14	0.88	-0.47	-11.4	-7.2
-0.1	-0.0	0.1	16.14	0.88	-0.47	-11.4	-7.1