

Motor Sensor Board (DFN) Test Results

Thickness Measurements			
PCB #	Mumetal Thickness (mm)	Component Height Maximum Observed (mm)	Total Thickness Under compression - maximum observed (mm)
1	0.26-0.3	1.64	1.98
2	0.27-0.29	1.66	1.98
3	0.27-0.3	1.67	1.97
4	0.28-0.3	1.67	1.98
8	0.26-0.3	1.65	1.98

Voltage Measurements			
PCB #	Reference Voltage (1.5V)	Supply Voltage (3.3V)	Input Voltage
1	1.48	3.28	4.5
2	1.49	3.28	4.5
3	1.48	3.29	4.5
4	1.48	3.28	4.5
8	1.48	3.28	4.5

Output Measurements			
<b>Measurement:</b>			
Each channel was measured with respect to one of the stator phases.			
The outputs were observed for stability with respect to the stator phase and to be free of noise.			
<b>Method:</b>			
The following outputs were captured from unit #3 as reference signals for all other units.			
Signal	Channel	Pin #	Scope Trace
Hall1 HI	1	6	<a href="#">pin_6.tif</a>
Hall1 Lo	1	5	<a href="#">pin_5.tif</a>
Hall2 HI	2	4	<a href="#">pin_4.tif</a>
Hall2 Lo	2	3	<a href="#">pin_3.tif</a>
Hall3 HI	3	2	<a href="#">pin_2.tif</a>
Hall3 Lo	3	1	<a href="#">pin_1.tif</a>

PCB#	Pin #	Output Stable	Output Free of Noise
1	1	✓	✓
1	2	✓	✓
1	3	✓	✓
1	4	✓	✓
1	5	✓	✓
1	6	✓	✓
2	1	✓	✓
2	2	✓	✓
2	3	✓	✓
2	4	✓	✓
2	5	✓	✓
2	6	✓	✓
3	1	✓	✓
3	2	✓	✓
3	3	✓	✓
3	4	✓	✓
3	5	✓	✓
3	6	✓	✓
4	1	✓	✓
4	2	✓	✓
4	3	✓	✓
4	4	✓	✓
4	5	✓	✓
4	6	✓	✓
8	1	✓	✓
8	2	✓	✓
8	3	✓	✓
8	4	✓	✓
8	5	✓	✓
8	6	✓	✓