

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	REV	DESCRIPTION	DATE	APPROVED

--	--	--	--	--	--

CONTRACT NO. 1430		QUAD TRON, INC.			
APPROVALS	DATE	MICRO MODULE PCM ENCODER, MODEL MI_MUX32_ADD1, 2, 3 32CHANNEL, HIGH LEVEL MUTIPLXER MODULES			
DRAWN	03/23/07				
CHECKED	03/23/07	SIZE	FSCM NO.	DRAWING NO.	REV
ISSUE	03/23/07	A	OBPE4	57-2611	SHEET 1 OF 5

MICRO PCM ENCODER SERIES

MODEL MI_MUX32-ADD1, Channels 33 up to 64
MI_MUX32_ADD2, Channels 65 up to 96
MI_MUX32_ADD3, Channels 97 up to 128

32 CHANNEL HIGH LEVEL, SINGLE ENDED MULTIPLEXER ADD ON MODULES

The add on modules were designed only to be used with the MI_MUX32 module. Each of these 3 modules allow the addition of 32 channels to the MI_MUX32 modules as follows:

ADD ON MODULES: MI_MUX32-ADD1, Channels 33 up to 64
MI_MUX32_ADD2, Channels 65 up to 96
MI_MUX32_ADD3, Channels 97 up to 128

NOTE: The add on modules “MUST STACK ON TOP” of the MI_MUX32 module.

Electrical Specifications:

Analog Inputs:

32 High Level, Single Ended Inputs.

Expandable up to 128 Channels, in increments of 32 by adding 32 channel modules.

Each Channel individually programmable for ± 2.5 Volts In or 0+5 Volts In.

Maximum Input ± 40 volts will not damage any analog input.

	SIZE A	FSCM NO. OBPE4	DWG NO. 57-2611	REV
				SHEET 2 OF 5

Environmental:

Operating Temperature: -40°C to +85°C
Storage Temperature: -55°C to +125°C
Humidity: Relative humidity of 85% for two hours at 65°C.
Altitude: Unlimited
Vibration: 20g's RMS from 5 to 2000Hz in each major axis.
Acceleration: Constant acceleration of 100g's in each axis.
Shock: 100g's for 10m second in each major axis.

Engraving: MI_MUX32_ADD1
MI_MUX32_ADD2
MI_MUX32_ADD3

Mechanical:

Size:
Length: 3.50 inches; Width: 1.25 inches; Height: 0.310 inches.

NOTE: The add on modules “MUST STACK ON TOP” of the MI_MUX32 module.

	SIZE A	FSCM NO. OBPE4	DWG NO. 57-2611	REV
				SHEET 3 OF 5

J1 pin connections

Connector P.N.: Nanonics # STMO51M6HN; TYCO # 4-1589487-5

Mate P.N.: P.N.: Nanonics # STMO51PC2DC018N; TYCO # 7-1589474-9

1	IN1	19	IN14	42	AGND
2	IN2	20	IN13	43	AGND
3	IN3	21	IN12	44	IN24
4	IN4	22	IN11	45	IN23
5	IN5	23	IN10	46	IN22
6	IN6	24	IN9	47	IN21
7	IN7	25	IN25	48	IN20
8	IN8	26	IN26	49	IN19
9	AGND	27	IN27	50	IN18
15	DGND	28	IN28	51	IN17
16	AGND	29	IN29		
17	IN16	30	IN30		
18	IN15	31	IN31		
		32	IN32		
		33	AGND		
		34	AGND		

<u>PIN</u>	<u>SIGNAL</u>	<u>FUNCTION</u>
1	IN1	Single ended input channel 1
2	IN2	Single ended input channel 2
3	IN3	Single ended input channel 3
4	IN4	Single ended input channel 4
5	IN5	Single ended input channel 5
6	IN6	Single ended input channel 6
7	IN7	Single ended input channel 7
8	IN8	Single ended input channel 8
24	IN9	Single ended input channel 9
23	IN10	Single ended input channel 10
22	IN11	Single ended input channel 11
21	IN12	Single ended input channel 12
20	IN13	Single ended input channel 13
19	IN14	Single ended input channel 14
18	IN15	Single ended input channel 15
17	IN16	Single ended input channel 16
51	IN17	Single ended input channel 17
50	IN18	Single ended input channel 18
49	IN19	Single ended input channel 19
48	IN20	Single ended input channel 20

	SIZE A	FSCM NO. OBPE4	DWG NO. 57-2611	REV
			SHEET 4 OF 5	

<u>PIN</u>	<u>SIGNAL</u>	<u>FUNCTION</u>
47	IN21	Single ended input channel 21
46	IN22	Single ended input channel 22
45	IN23	Single ended input channel 23
44	IN24	Single ended input channel 24
25	IN25	Single ended input channel 25
26	IN26	Single ended input channel 26
27	IN27	Single ended input channel 27
28	IN28	Single ended input channel 28
29	IN29	Single ended input channel 29
30	IN30	Single ended input channel 30
31	IN31	Single ended input channel 31
32	IN32	Single ended input channel 32

9	AGND	Analog Ground
16	AGND	Analog Ground
33	AGND	Analog Ground
34	AGND	Analog Ground
42	AGND	Analog Ground
43	AGND	Analog Ground

15	DGND	Digital Ground
----	------	----------------

	SIZE A	FSCM NO. OBPE4	DWG NO. 57-2611	REV
			SHEET 5 OF 5	