Tgv32bh, tgv32ch Pad Definitions
Rev E. (5/21/98)
(Note: These apply to the t32bh and t32ch chip revisions ONLY)

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SIGNALS

qin1-32 -   Charge inputs from detectors.

vout1-32 -   Voltage outputs from preamplifier channels.

calibrate_bar -   Normally low. After calibration pattern is loaded, pin is changed to high for pre-charge and then low for actual calibration voltage output.

pre_bias -   Output of preamplifier bias point. Needs to have filter capacitor (1uF).

pre_reset -   Preamplifier reset. Normally low. Reset occurs when high.

s2_reset -   Stage 2 reset. Normally low. Reset occurs when high.

s2_bias -   Output of stage 2 bias point. Needs to have filter capacitor (1uF).

discbias_1 -   Discriminator bias output.

discbias_2 -   Discriminator bias output.

ibias -   Current output bias point.

idiscout -   Multiplicity current output. Approx. $50\mu A$/channel.

readback_en -   Normally low. After data is loaded, this line is forced high for one full **sclk** pulse. The line is then forced low. The readback is then accomplished by continuously pulsing **sclk**.

reset -   Normally low. Master shift-logic reset when high.

sdout -   Output of serial string stored data.

vcal -   Monitor point of calibration voltage.

vgate -   Monitor point for discriminator gate voltage.

vfb_res - Monitor point for preamplifier feedback resistor control voltage.

sdin - Input for serial string data.

dac_bias - Output of dac bias point.

dac_vmid - 2.5 volt input for dac bias.

disc_vmid - Monitor point for discriminator midpoint voltage.

ithresh - Monitor point for discriminator threshold bias.

dclk - Normally low. Positive edge clocks serial data into data registers.

sclk - Normally low. Positive edge clocks serial data into shift registers.

dac_amp_bias1 Bias point output for vcal and vfb_res dacs.

dac_amp_bias2 Bias point output for vgate and disc_vmid, and ithresh dacs.

POWER

vdd_dig - Digital +5V.

vss_dig - Digital GND.

vdd_pre - Preamplifier and detector return +5V.

vss_pre - Preamplifier GND.

vdd_post - 2nd stage, discriminator, and pad frame +5V.

vss_post - 2nd stage, discriminator, and pad frame GND.

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Thin Glenn 32 (ver. 2)

(t32bh)

Pin	Top labels
109	dac_amp_bias1
108	vdd_pre
107	vss_pre
106	vcal
105	vgate
104	vfb_res
103	dac_bias
102	dac_vmid
101	ithresh
100	disc_vmid
99	vdd_post
98	vss_post
97	vss_dig
96	vdd_dig
95	sdin
94	dclk
93	sclk
92	vss_dig
91	vdd_dig
90	vss_post
89	vdd_post

110 vdd_pre

1 qin1
2 qin2
3 qin3
4 qin4
5 qin5
6 qin6
7 qin7
8 qin8
9 qin9
10 qin10
11 qin11
12 qin12
13 qin13
14 qin14
15 qin15
16 qin16
17 qin17
18 qin18
19 qin19
20 qin20
21 qin21
22 qin22
23 qin23
24 qin24
25 qin25
26 qin26
27 qin27
28 qin28
29 qin29
30 qin30
31 qin31
32 qin32

33 vdd_pre

88 dac_amp_bias2
87 vss_post
86 vdd_post

85 vout1
84 vout2
83 vout3
82 vout4
81 vout5
80 vout6
79 vout7
78 vout8
77 vout9
76 vout10
75 vout11
74 vout12
73 vout13
72 vout14
71 vout15
70 vout16
69 vout17
68 vout18
67 vout19
66 vout20
65 vout21
64 vout22
63 vout23
62 vout24
61 vout25
60 vout26
59 vout27
58 vout28
57 vout29
56 vout30
55 vout31
54 vout32

53 vdd_post
52 vss_post

Pin	Bottom labels
34	vdd_pre
35	vss_pre
36	pre_bias
37	s2_bias
38	discbias_1
39	discbias_2
40	ibias
41	calibrate_bar
42	pre_reset
43	s2_reset
44	vdd_post
45	vss_post
46	idiscout
47	readback_en
48	reset
49	vdd_dig
50	vss_dig
51	sdout