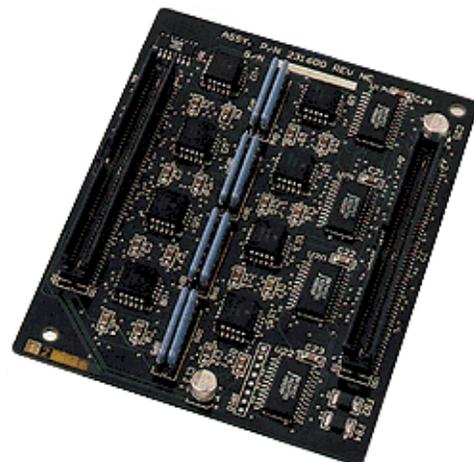


# GT5940 SERIES



## PECL I/O MODULES FOR GT515X CARDS

- PECL to TTL and TTL to PECL
- PECL to TTL clock input
- Optional module termination
- For use with GT5150 or GT5900



## DESCRIPTION

The GT5940 PECL I/O module provides a bi-directional interface for PECL applications. The GT5940 is a plug-in module mounted onto the GT5150 or the GT5900. In addition to the 32 I/O channels, the GT5940 provides a conversion channel for a PECL external clock signal.

## ARCHITECTURE

The GT5940 PECL translation module employs eight MC10H350 differential level converters to provide translation from PECL to TTL levels. Eight MC10H351 differential level shifters provide translation from TTL to PECL levels. SIP sockets allow users to install PECL terminators specific to their application.

## PROGRAMMING

The GT5940 module's data directional control is determined by the host system software.

## APPLICATIONS

- PECL to TTL conversion
- TTL to PECL conversion

## SPECIFICATIONS

GENERAL	
Differential I/O Channels	32 bi-directional
Per Module	+1 clock (input only)
Terminations	8-pin isolated SIP sockets 68 factory Installed
PECL Input (PECL-TTL)	V <sub>cc</sub> =PECL (min) V <sub>cc</sub> =5.0 V @ 25 °C (max) Type: MC10H350
Output Level	High: 2.7 V (min) Low: 0.5 V (max)
Differential Input Voltage	350 mV (min)
Voltage Common Mode*	2.8 V (min) *Common mode input voltage must be between the values of 2.8 V and 5.0 V. This common mode input voltage range includes the differential input swing.
Short Circuit Current	-60 mA (min) -150 mA (max)
PECL Output (TTL-PECL)	V <sub>cc</sub> =PECL (min) V <sub>cc</sub> =5.0 V @ 25 °C (max) Type: MC10H351
Output Level	High: 4.02 V (min), 4.19 V (max) Low: 3.05 V (min), 3.37 V (max)
Input Level	High: 2.0 V (min) Low: 0.8 V (max)
Input Breakdown Voltage	5.5 V (min)
Power	at 5 VDC : 1.4 A



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Propagation	Delay Output: 0.4 ns (min), 1.3 ns (typ), 2.2 ns (max) Delay Input: 1.5 ns (min), 3.5 ns (typ), 5.0 ns (max)
Operating Temperature	0 °C to +50 °C
Storage Temperature	-20 °C to +70 °C
Size	4.40" x 3.40"
Weight	70 g

Note: Specifications are subject to change without notice

## ORDERING INFORMATION

GT5940-R	PECL Input Module for GT515X, 32 PECL Channels at Up to 50MHz
GT5940-T	PECL Output Module for GT515X, 32 PECL Channels at Up to 50MHz