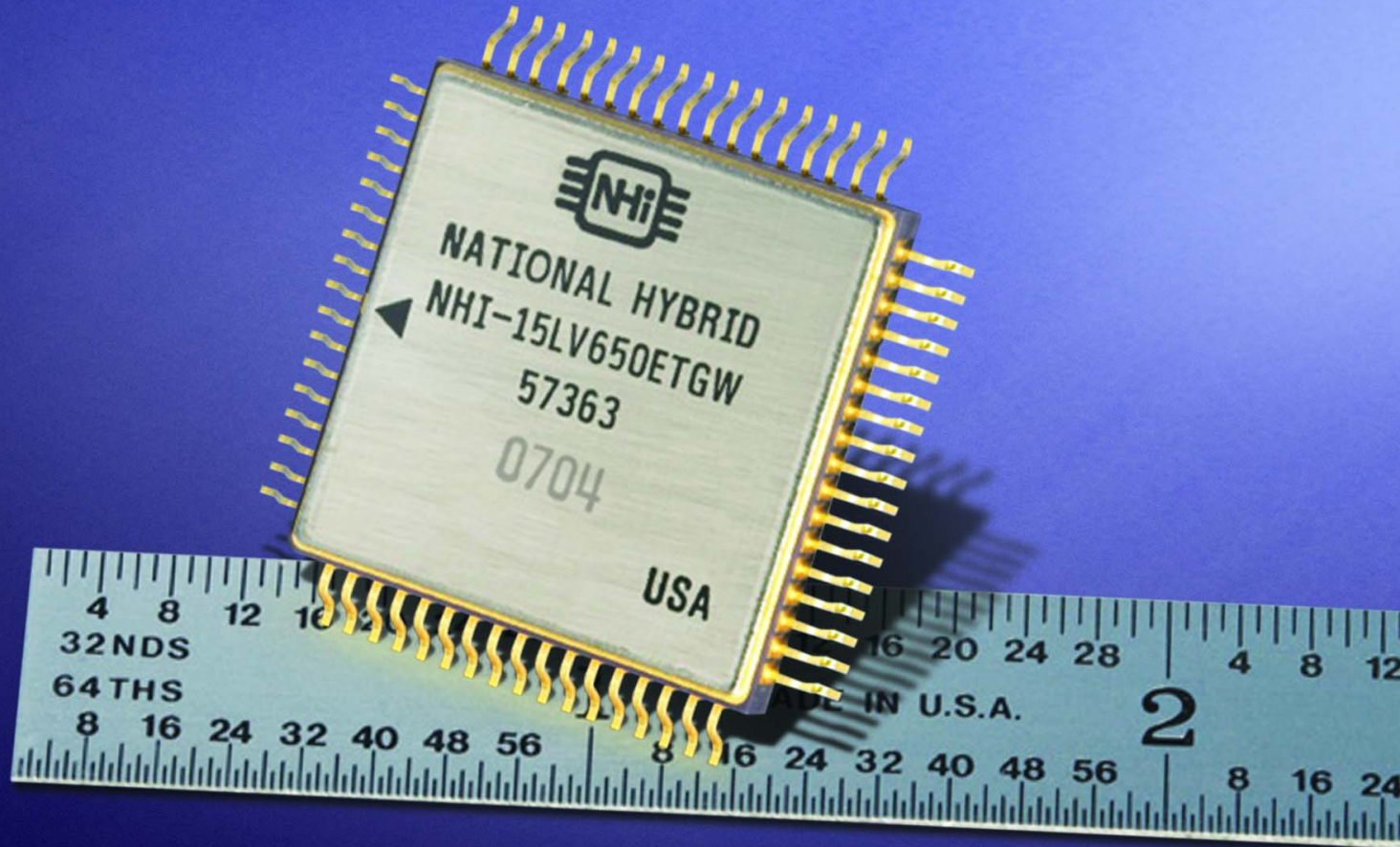


Multi-Protocol Mil-Std-Data Bus Interface Model # NHI-156XXET



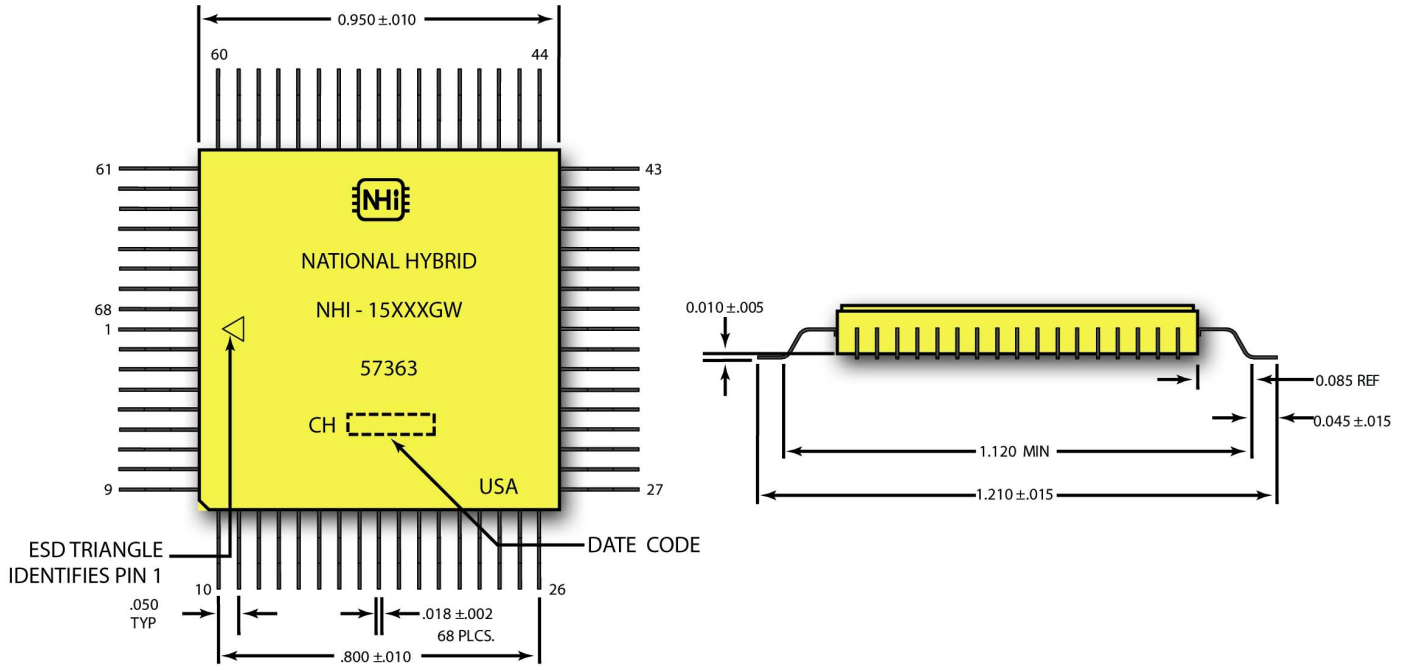
The NHi Ceramic family of Mil-Std-1553 terminals address the requirements for small, cost effective, reliable terminals suitable for critical military applications. The Ceramic family is designed as an autonomous interface between a host processor and the terminal that unburdens the CPU. The ET versions function as a programmable BC/RT/MT or simultaneous MT/RT. The RT devices operate as Remote Terminal only.

FEATURES

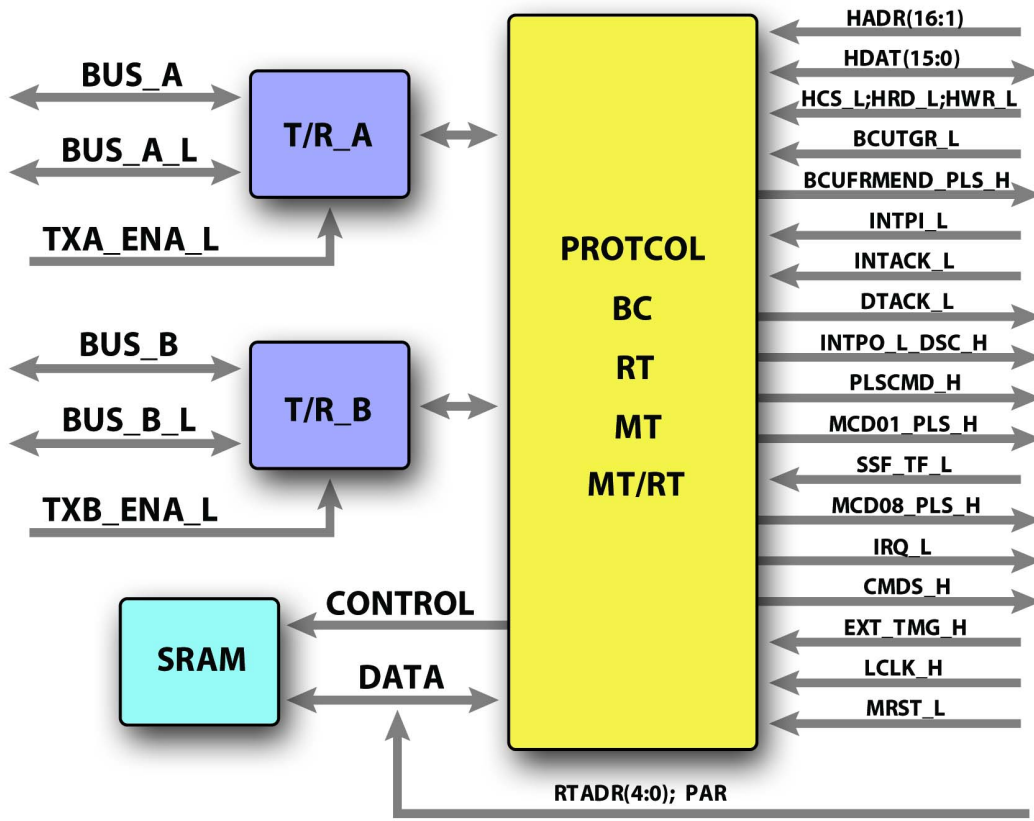
- Dimensions: 0.95 x 0.95 inches
- Footprint Less Than 1 Square Inch
- 68 Pin Ceramic QFP
- +3.3V or +5V NHi Monolithic Transceivers
3.3V Logic
- Low Power CMOS Interface
- Multi-Protocol Interface
- PCI bus or Local Bus Subsystem Interface
- 20 MHz Clock
- Dual Port Double Buffered 64K x 16 SRAM
- BC-RT-MT-MT/RT Terminals
- RT-Only Terminals

Generic Package Outline Drawing

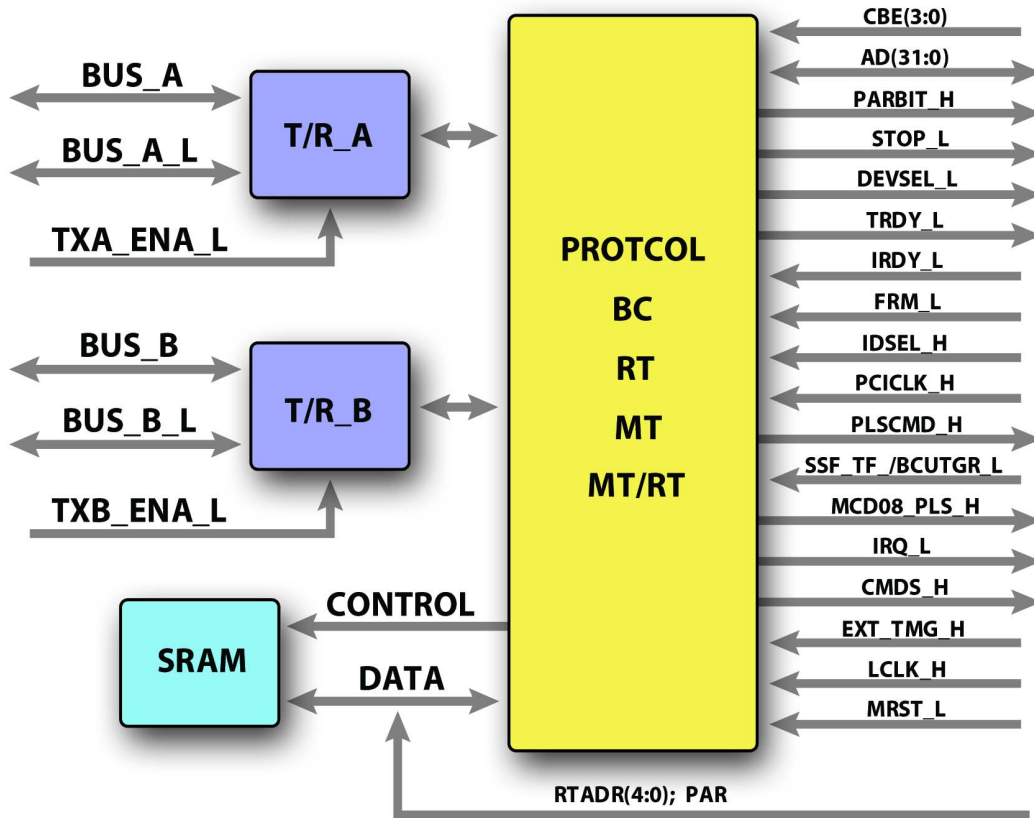
Quad Gull Wing and Quad Flat Pack Packages
Gold Plated Kovar Leads



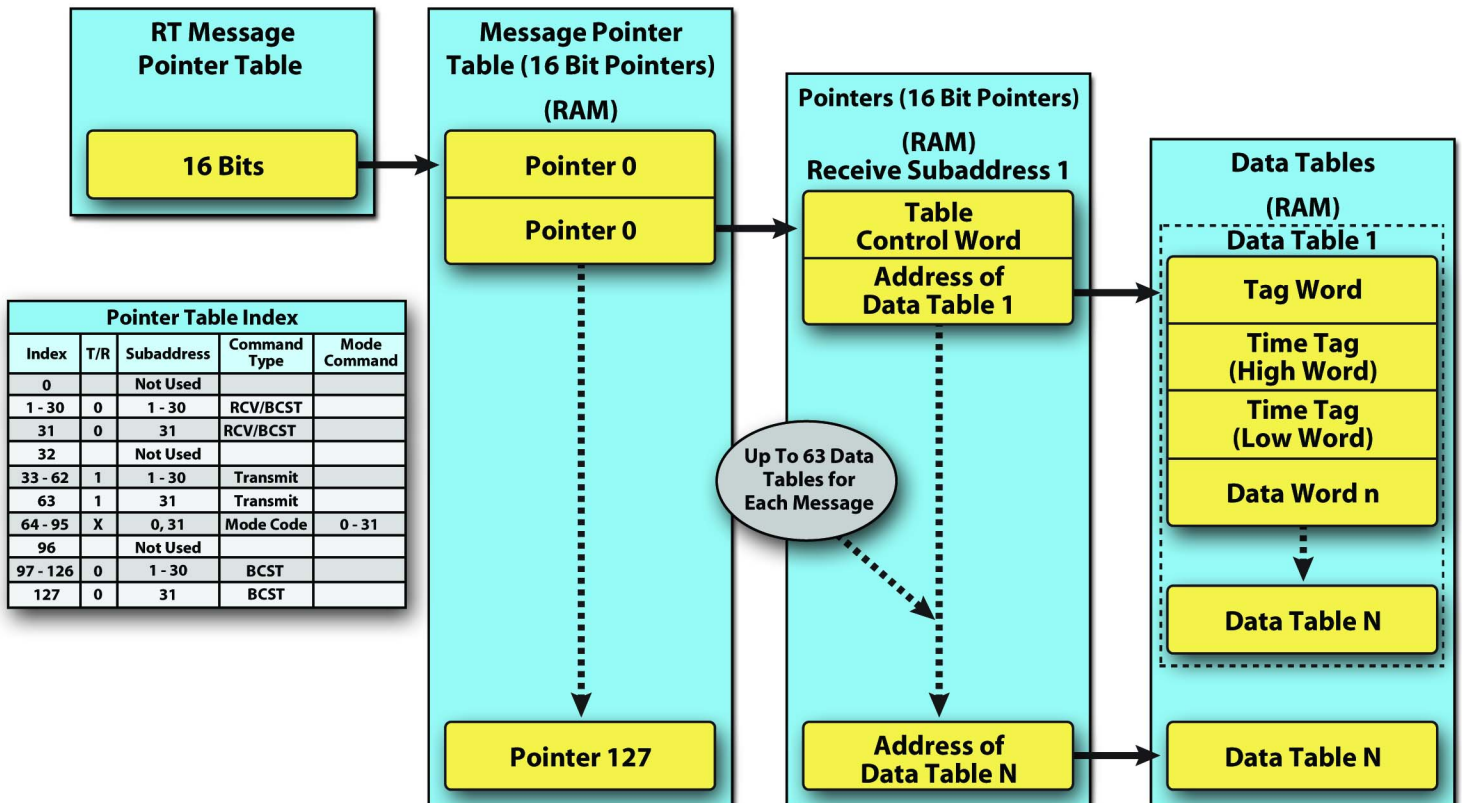
Local Bus Terminal Block Diagram



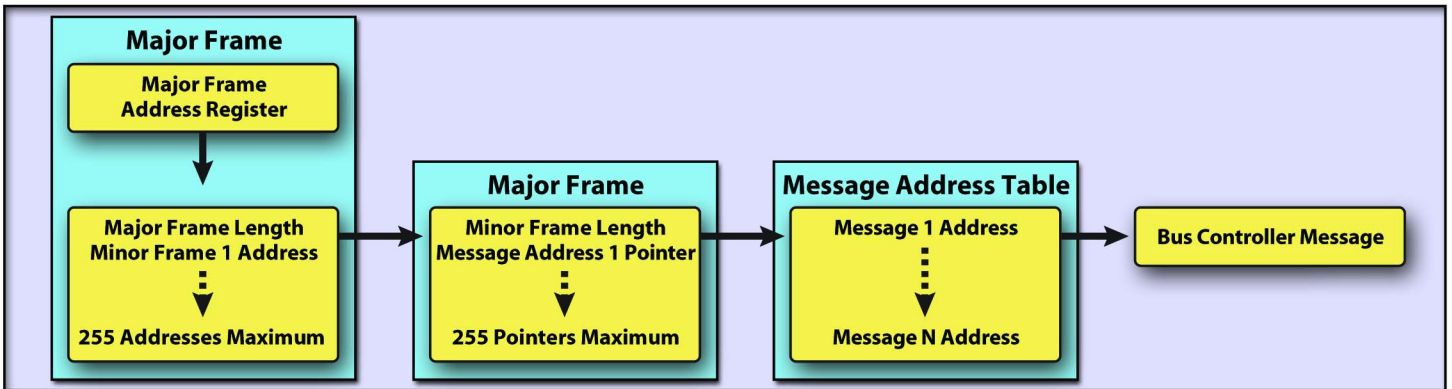
PCI Bus Terminal Block Diagram



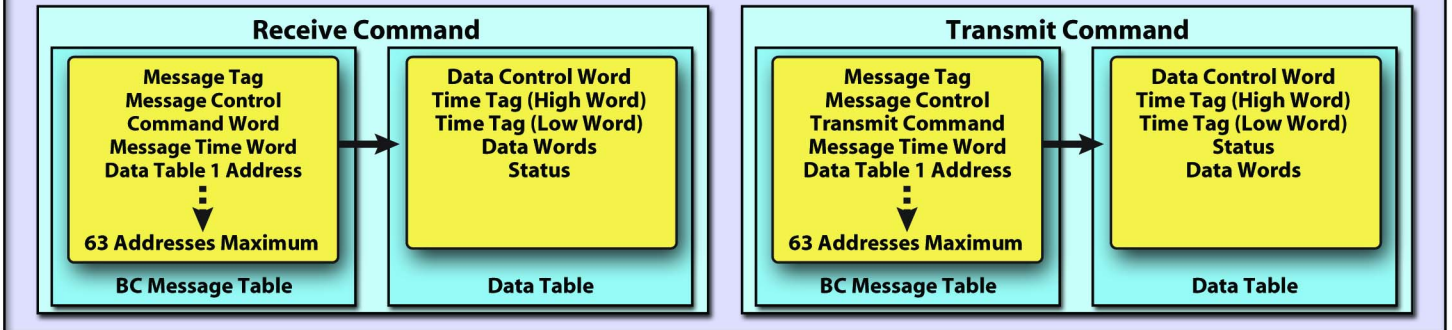
Remote Terminal Message Map



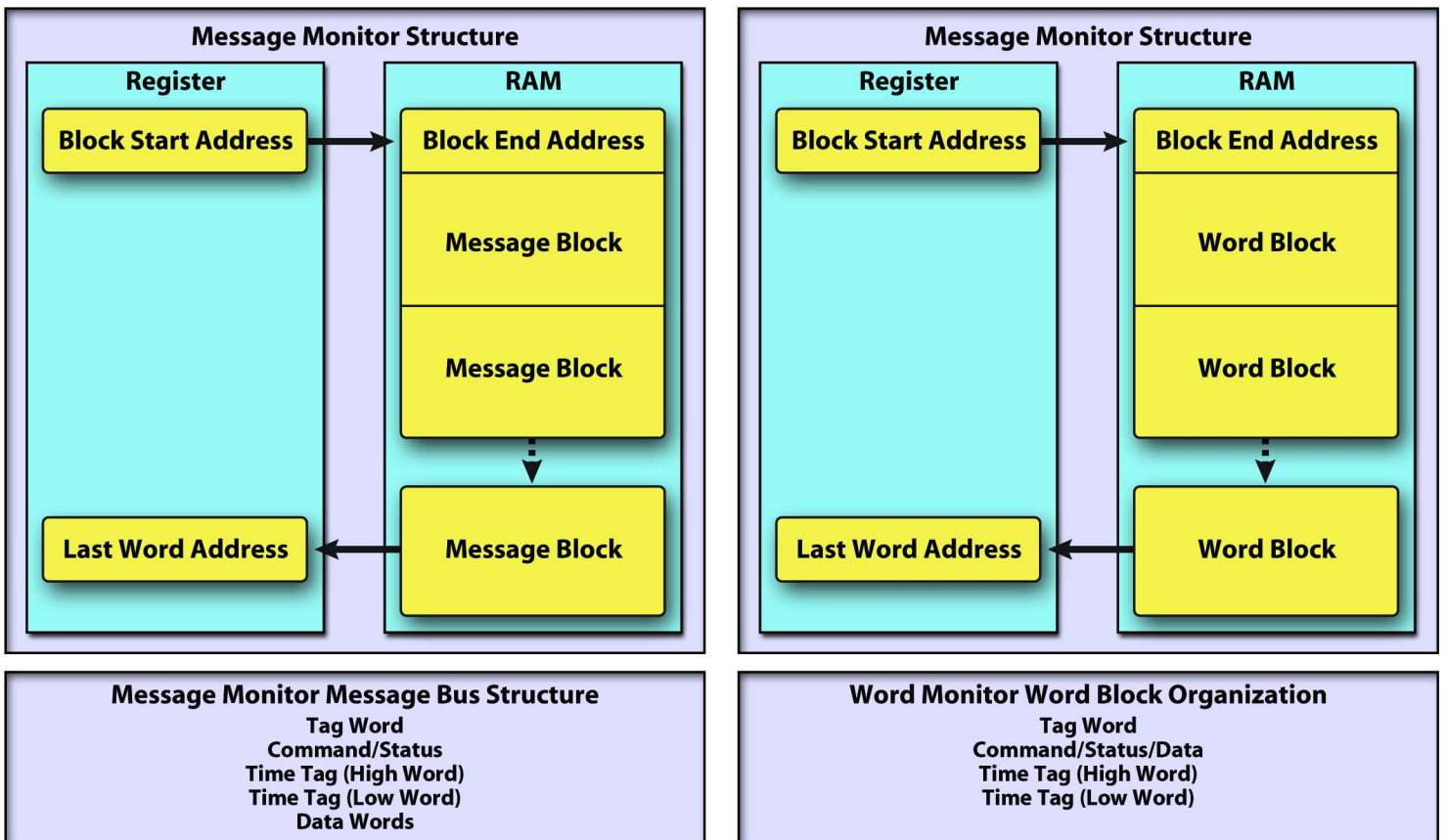
Bus Controller Message Map



Sample Message Structures



Bus Monitor Message Map



SPECIFICATIONS

PARAMETER		MIN	MAX	UNITS
Power Supply Requirements				
3.3V Logic		3.0	3.6	V
5V Transceiver		4.7	5.5	V
3.3V Transceiver		3.15	3.45	V
Current Requirements				
5V Transceiver	Idle	27	38	mA
	100%	465	625	mA
3.3V Transceiver	Idle	23	38	
	100%	700	900	
3.3V Logic/RAM		8	20	mA
Logic I/O				
V _{IL}		-0.3	0.8	V
V _{IH}		2.0	3.6	V
V _{OL}			0.4	V
V _{OH}		2.4		V
PCI		3.3V signaling only		
Clock				
			20	MHz
Thermal				
Resistance, Junction to Case			4	°C/W
Case Operating		-55	+125	°C
Case Storage		-65	+150	°C
Lead, Soldering			+300	°C
Package				
68-pin Quad Gull Wing	0.95 x 0.95 x 0.165			inches
	24.13 x 24.13 x 4.19			mm
	0.247			oz
	7.0			gm
68-pin Quad Flat Pack	0.95 x 0.95 x 0.155			inches
	24.13 x 24.13 x 3.94			mm
	0.247			oz
	7.0			gm



ORDERING INFORMATION

Unless otherwise specified, all terminals contain the following standard features:

- Dual Redundant +3.3 Volt Logic Operation
- NHi Monolithic +5v or +3.3V Transceivers
- Bus Controller, Bus Monitor, Remote Terminal, Bus Monitor/Remote Terminal
- PCI Bus or Local Bus Interface
- 64K Word Internal Ram
- Multi Protocol Compliant
- Trapezoidal Output Waveform
- External Time Tag Input
- BC Trigger
- Package Pins Defined in Pin Function Table

NHi-15LV6XXETGW/T

				Grade
			CH	Compliant to MIL- PRF- 38534 Class H
			M	MIL- PRF- 38534 Table VIII Device Screening.
			T	Industrial Grade, MIL Temp: -55 to +125° C
			Blank	Industrial, -40 to +85° C
				Package
			GW	68 Pin Gull Wing lead formed Quad FlatPack
			FP	68 Pin Straight Lead Quad FlatPack
				Function
			ET	BC, RT, MT, MT/RT
			RT	RT Only
				Device
				1MHz TERMINALS
			625ET	BC, MT, RT, MT/RT; PCI Bus Interface
			635ET	BC, MT, RT, MT/RT; PCI Bus Interface, 1760 output level
			671RT	RT Only; PCI Bus Interface
			673RT	RT Only; PCI Bus Interface, 1760 output level
			650ET	BC, MT, RT, MT/RT; Local Bus Interface
			660ET	BC, MT, RT, MT/RT; Local Bus Interface., 1760 output level
			675ET	BC, MT, RT, MT/RT; Local Bus Interface., No Transceivers
			676ET	BC, MT, RT, MT/RT; PCI Bus Interface., No Transceivers
			691RT	RT Only; Local Bus Interface
			693RT	RT Only; Local Bus Interface, 1760 output level
				Operating Voltage
			Blank	+3.3v Logic; +5v Transceivers
			LV	+3.3v Logic; +3.3v Transceivers