
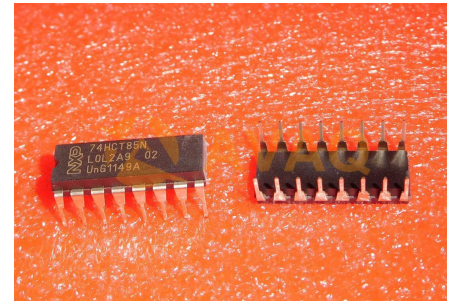


Magnitude Comparator 4-Bit Non-Inverting 16-Pin PDIP

Manufacturer:	Nexperia Semiconductor (NXP)
Package/Case:	DIP16
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Obsolete



Images are for reference only

[Inquiry](#)

General Description

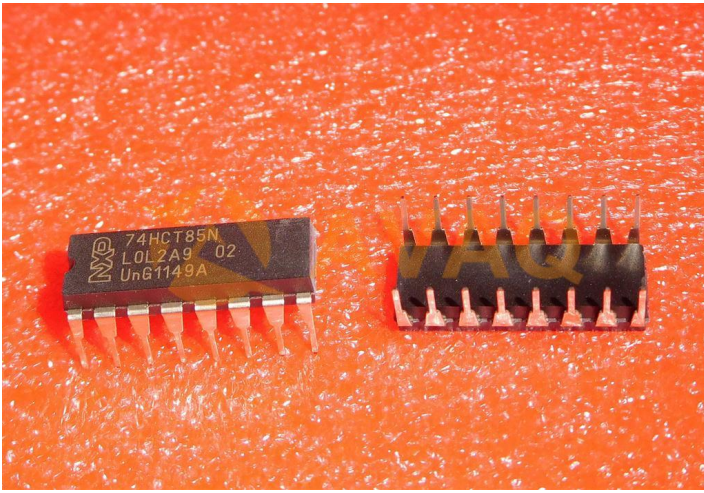
INTEGRATED CIRCUITS DATA SHEET FAMILY SPECIFICATIONS HCMOS family characteristics March 1988 File under Integrated Circuits, IC06 Philips Semiconductors HCMOS family characteristics GENERAL These family specifications cover the common electrical ratings and characteristics of the entire HCMOS 74HC/HCT/HCU family, unless otherwise specified in the individual device data sheet. INTRODUCTION The 74HC/HCT/HCU high-speed Si-gate CMOS logic family combines the low power advantages of the HE4000B family with the high speed and drive capability of the low power Schottky TTL (LSTTL). The family will have the same pin-out as the 74 series and provide the same circuit functions. In these families are included several HE4000B family circuits which do not have TTL counterparts, and some special circuits. The basic family of buffered devices, designated as XX74HCXXXXX, will operate at CMOS input logic levels for high noise immunity, negligible typical quiescent supply and input current. It is operated from a power supply of 2 to 6 V. FAMILY SPECIFICATIONS A subset of the family, designated as XX74HCTXXXXX, with the same features and functions as the “HC-types”, will operate at standard TTL power supply voltage ($5\text{ V} \pm 10\%$) and logic input levels (0.8 to 2.0 V) for use as pin-to-pin compatible CMOS replacements to reduce power consumption without loss of speed. These types are also suitable for converted switching from TTL to CMOS. Another subset, the XX74HCUXXXXX, consists of single-stage unbuffered CMOS compatible devices for application in RC or crystal controlled oscillators and other types of feedback circuits which operate in the linear mode. HANDLING MOS DEVICES Inputs and outputs are protected against electrostatic effects in a wide variety of device-handling situations. However, to be totally safe, it is desirable to take handling precautions into account (see also “HANDLING PRECAUTIONS”). RECOMMENDED OPERATING CONDITIONS FOR 74HC/HCT 74HC SYMBOL PARAMETER min. typ. VCC VI VO Tamb Tamb tr, tf DC supply voltage DC input voltage range DC output voltage range 2.0 0 0 5.0 max. 6.0 VCC VCC +85 +125 1000 6.0 500 400 Note 1. For analog switches, e.g. “4016”, “4051 series”, “4351 series”, “4066” and “4067”, the specified maximum operating supply voltage is 10 V. 6.0 500 ns min. typ. max. 4.5 0 0 -40 -40 5.0 5.5 VCC VCC +85 +125 V V V °C °C see DC and AC CHAR. per device VCC = 2.0 V VCC = 4.5 V VCC = 6.0 V 74HCT UNIT CONDITIONS operating ambient temperature range -40 operating ambient temperature range -40 input rise and fall times except for Schmitt-trigger inputs March 1988 2 Philips Semiconductors HCMOS family characteristics RECOMMENDED OPERATING CONDITIONS FOR 74HCU FAMILY SPECIFICATIONS 74HCU SYMBOL VCC VI VO Tamb Tamb PARAMETER min. typ. max. DC supply voltage DC input voltage range DC output voltage range operating ambient temperature range operating ambient temperature range 2.0 0 0 -40 -40 5.0 6.0 [...]

Key Features

- Serial or parallel expansion without extra gating
- Magnitude comparison of any binary words
- Output capability - Standard
- Complies with JEDEC standard No. 7A

Application

Industrial, Consumer Electronics



Recommended For You

74HCT123D

Nexperia Semiconductor (NXP)

SOP16

74LVC1G11GW-Q100H

Nexperia Semiconductor (NXP)

SOT363

74LVC06APW-Q100J

Nexperia Semiconductor (NXP)

14-TSSOP

74LVC244APW,118

Nexperia Semiconductor (NXP)

TSSOP20

74HC123D

Nexperia Semiconductor (NXP)

SOP16

74LVC1G123DC,125

Nexperia Semiconductor (NXP)

VSSOP8

74HCT123N

Nexperia Semiconductor (NXP)

DIP16

74LVC1G14GW-Q100,1

Nexperia Semiconductor (NXP)

SOT353

74LVC86APW,118

Nexperia Semiconductor (NXP)

TSSOP14

74HCT280D

Nexperia Semiconductor (NXP)

3.9mm

74HC73D,653

Nexperia Semiconductor (NXP)

14-SO

74HC40105D

Nexperia Semiconductor (NXP)

SOP

74HC245PW,118

Nexperia Semiconductor (NXP)

TSSOP20

74LVC07APW,118

Nexperia Semiconductor (NXP)

TSSOP14

74HC4514D,653

Nexperia Semiconductor (NXP)

SOP-24