

SN54ALS688, SN74ALS688 8-BIT IDENTITY COMPARATORS

SDAS228A – JUNE 1982 – REVISED JANUARY 1995

- Compare Two 8-Bit Words
- Totem-Pole Outputs ($\overline{P = Q}$)
- 'ALS688 Are Identical to 'ALS521
- Package Options Include Plastic Small-Outline (DW) Packages, Ceramic Chip Carriers (FK), and Standard Plastic (N) and Ceramic (J) 300-mil DIPs

description

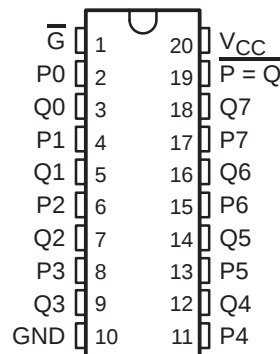
These identity comparators perform comparisons on two 8-bit binary or BCD words and provide $\overline{P = Q}$ outputs. These devices have totem-pole outputs.

The SN54ALS688 is characterized for operation over the full military temperature range of -55°C to 125°C . The SN74ALS688 is characterized for operation from 0°C to 70°C .

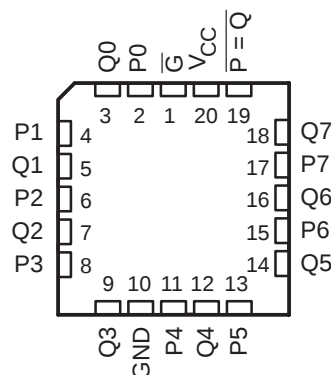
FUNCTION TABLE

INPUTS		OUTPUT $\overline{P = Q}$
DATA P, Q	ENABLE $\overline{G}$	
$P = Q$	L	L
$P > Q$	L	H
$P < Q$	L	H
X	H	H

SN54ALS688 . . . J PACKAGE
SN74ALS688 . . . DW OR N PACKAGE
(TOP VIEW)



SN54ALS688 . . . FK PACKAGE
(TOP VIEW)



PACKAGING INFORMATION

Orderable Device	Status ⁽¹⁾	Package Type	Package Drawing	Pins	Package Qty	Eco Plan ⁽²⁾	Lead/Ball Finish	MSL Peak Temp ⁽³⁾
5962-88578012A	ACTIVE	LCCC	FK	20	1	TBD	Call TI	Level-NC-NC-NC
5962-8857801RA	ACTIVE	CDIP	J	20	1	TBD	Call TI	Level-NC-NC-NC
5962-8857801SA	ACTIVE	CFP	W	20	1	TBD	Call TI	Level-NC-NC-NC
SN54ALS688J	ACTIVE	CDIP	J	20	1	TBD	Call TI	Level-NC-NC-NC
SN74ALS688DW	ACTIVE	SOIC	DW	20	25	Pb-Free (RoHS)	CU NIPDAU	Level-2-250C-1 YEAR/ Level-1-235C-UNLIM
SN74ALS688DWR	ACTIVE	SOIC	DW	20	2000	Pb-Free (RoHS)	CU NIPDAU	Level-2-250C-1 YEAR/ Level-1-235C-UNLIM
SN74ALS688N	ACTIVE	PDIP	N	20	20	Pb-Free (RoHS)	CU NIPDAU	Level-NC-NC-NC
SN74ALS688N3	OBSOLETE	PDIP	N	20		TBD	Call TI	Call TI
SN74ALS688NSR	ACTIVE	SO	NS	20	2000	Pb-Free (RoHS)	CU NIPDAU	Level-2-260C-1 YEAR/ Level-1-235C-UNLIM
SNJ54ALS688FK	ACTIVE	LCCC	FK	20	1	TBD	Call TI	Level-NC-NC-NC
SNJ54ALS688J	ACTIVE	CDIP	J	20	1	TBD	Call TI	Level-NC-NC-NC
SNJ54ALS688W	ACTIVE	CFP	W	20	1	TBD	Call TI	Level-NC-NC-NC

⁽¹⁾ The marketing status values are defined as follows:

ACTIVE: Product device recommended for new designs.

LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

PREVIEW: Device has been announced but is not in production. Samples may or may not be available.

OBSOLETE: TI has discontinued the production of the device.

⁽²⁾ Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS) or Green (RoHS & no Sb/Br) - please check <http://www.ti.com/productcontent> for the latest availability information and additional product content details.

TBD: The Pb-Free/Green conversion plan has not been defined.

Pb-Free (RoHS): TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes.

Green (RoHS & no Sb/Br): TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

⁽³⁾ MSL, Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.

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