

November 1989
Edition 1.0

PRODUCT PROFILE

MB766

Octal ECL to TTL Level Translator

DESCRIPTION

The Fujitsu MB766 is a high-speed ECL-to-TTL level translator with eight circuits. The MB766 ECL input interface is compatible with 10KH ECL. The MB766 is housed in a 20-pin plastic or ceramic dual in-line package, 22-pin PLCC, and 24-pin ceramic LCC.

FEATURES

- High speed switching:
Propagation delay time: 5.0 ns (typ.)
(75 pF load capacitance).
- High density mounting:
Eight circuits per package.
- Input interface level:
Compatible with 10KH ECL.
- Power supply voltage:
5.0 V (V_{CC}) and -5.2 V (V_{EE}),
which are typical for TTL and ECL.
Switching on and off can be done
either with V_{CC} or V_{EE} .

ABSOLUTE MAXIMUM RATINGS

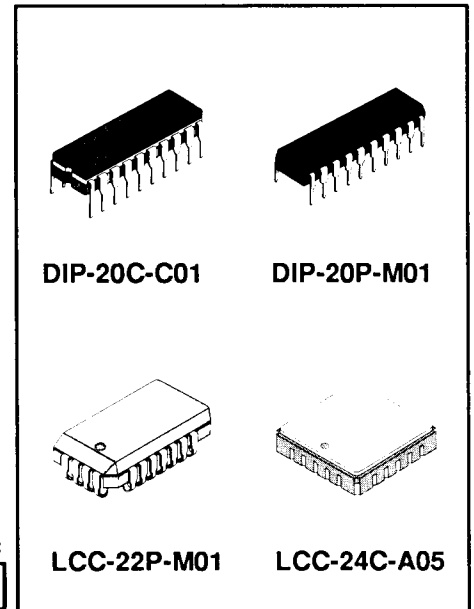
$T_A = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Power Supply Voltage	V_{CC}	0 to +7.0	V
Power Supply Voltage	V_{EE}	-7.0 to 0	V
Input Voltage	V_i	-5.5 to 0	V
Input Current	I_i	0 to 5	mA
Output Voltage	V_o	-0.5 to +5.5	V
Output Current (X Output = L)	I_{OUT}	0 to 40	mA
Operating Ambient Temperature	T_A	-10 to +125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

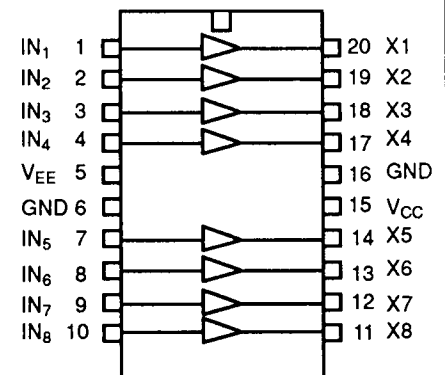
RECOMMENDED OPERATING CONDITIONS

Parameter	Symbol	Rating	Unit
Power Supply Voltage	V_{CC}	+5.0 \pm 10%	V
Power Supply Voltage	V_{EE}	-5.2 \pm 10%	V
Input Voltage	V_{IECL}	V_{EE} to 0	V
Output Current (X Output = L)	I_{OUT}	0 to 20	mA
Operating Ambient Temperature	T_A	0 to 75	$^\circ\text{C}$

NOTE: Permanent device damage may occur if absolute maximum ratings are exceeded. Functional operation should be restricted to the conditions as detailed in the operation sections of this data sheet. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.



PIN ASSIGNMENT (TOP VIEW) 20 Pin DIP



INPUT: IN₁ to IN₈ = ECL level input
OUTPUT: X₁ to X₈ = TTL level output
PLCC and LCC pinouts are shown in the complete data sheet

TRUTH TABLE

Input	Output
IN _n (ECL)	X _n (TTL)
H	H
L	L