

UTE

Spécification française harmonisée
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CECC 90 101-040

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Nombre total de pages : 18
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COMPOSANTS ELECTRONIQUES SOUS ASSURANCE
DE QUALITE CONFORMEMENT A :
*ELECTRONIC COMPONENTS OF ASSESSED QUALITY
IN ACCORDANCE WITH :*

GS : CECC 90 000 (NF C 86-020)

SS : CECC 90 100 (NF C 86-200)

FS : CECC 90 101 (NF C 86-213)

UTE C 86-213/B 60

Adoptée le 16 novembre 1987

BS9401 F1181 to F1193

Issue 1

February, 1977

DESSIN ET DIMENSIONS :
OUTLINE AND DIMENSIONS :

CEI 191-2 - Types 050 G 04 - 050 G 03
IEC 191-2 -

Référence française : F 105 - F 105A
French reference :

IDENTIFICATION DES CONNEXIONS
TERMINAL CONNECTIONS

Voir Tableau II
See Table II

SPECIFICATION PARTICULIERE POUR
MICROSTRUCTURES LOGIQUES SELON FS 90 101
DETAIL SPECIFICATION FOR DIGITAL INTEGRATED CIRCUITS IN ACCORDANCE WITH FS 90 101

54/64/74 136

CIRCUIT OU-EXCLUSIF
A SORTIES COLLECTEUR OUVERT
*QUAD 2-INPUT EXCLUSIVE OR GATE
WITH OPEN COLLECTOR OUTPUTS*

TECHNOLOGIE DE FABRICATION :
TYPICAL CONSTRUCTION :

Circuit monolithique bipolaire au silicium, boîtiers
avec ou sans cavité.

*Silicon monolithic bipolar integrated circuit,
cavity/non-cavity packages.*

NIVEAUX D'ASSURANCE DE QUALITE : P, Y, L
ASSESSMENT LEVELS :

AMENDMENTS TO THE FOLLOWING CLAUSES

§ 2 - Add :

Most negative low level input voltage at an input current : $I_{IKB} = -12 \text{ mA}$, $V_{IKB} = -1,5 \text{ V}$

§ 3 To be replaced by CECC 90 000/3 § 2.5

§ 4 To be deleted

§ 5 To be replaced by CECC 90 000/3 § 2.6

§ 6 To be replaced by CECC 90 000/3 § 4.10.1

§ 7 All inspection level and AQL are those specified in 90 100/3.

Replace A3b by A4a, A3c by A4b, A4 by A5.

Add A8 of 90 100/3 (Assessment level P only).

Apply to A2 extreme temperature testing with A7a/A7b 90 000 inspection requirements.

For groups B, C, D, apply 90 100/3.

Sub-groups A6, A7 : not applicable.

Se reporter à la Liste des Produits Homologués CECC 00 200 en vigueur pour connaître les fabricants dont les composants conformes à cette spécification particulière sont homologués.

Information about manufacturers who have components qualified to this detail specification is available in the current CECC 00 200 : Qualified Products List.

BRITISH STANDARDS INSTITUTION

2 PARK STREET, LONDON, W1A 2BS

Specification available from:— As shown in PD9002

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**ELECTRONIC COMPONENTS OF ASSESSED QUALITY
DETAIL SPECIFICATION IN ACCORDANCE WITH**

BS9400 : 1970

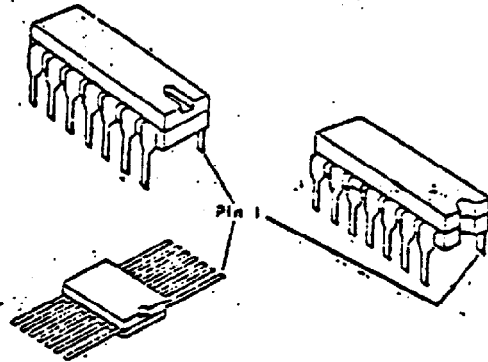
MANUFACTURER'S TYPE NUMBER

54136

64136

74136

Outlines not to scale. Isometric projection.



For details dimensions:

14 Lead Flat-Pack — see Appendix I

14 Lead Quad in-line — BS 3934 SO-878

Marking information:

see Clause 3

For ordering information

see Clause 5

SILICON MONOLITHIC T.T.L.
QUAD 2-INPUT EXCLUSIVE - OR
GATES WITH OPEN COLLECTOR
OUTPUTSCERAMIC/GLASS HERMETICALLY
SEALED ENCAPSULATION OR
DUAL-IN-LINE PLASTIC
ENCAPSULATIONFULL ASSESSMENT LEVEL AND
APPLICATION CATEGORIES

S1, S2, S3 AND S4

1. LIMITING CONDITIONS OF USE (not for inspection purposes)

Absolute values (non-simultaneous)

V_{CC}	Maximum continuous positive supply voltage	7.0 V
	Maximum continuous negative supply voltage	0.5 V
V_{IN}	Maximum continuous positive input voltage	5.5 V
$-V_{IN}$	Maximum continuous negative input voltage	0.5 V
I_{IN}	Maximum input current	1.0 mA
$-I_{IN}$	Maximum reverse input current (clamping mode)	8.0 mA
T_{amb}	Ambient operating temperature range	54136 -55 °C to +125 °C
		64136 -40 °C to + 85 °C
		74136 0 °C to + 70 °C
T_{stg}	Storage temperature range	-65 °C to +150 °C
	Shock (0.5 ms duration)	14 700 m/s ²
	Vibration	196 m/s ²

Refer to Qualified Products List PD 9002 for details of Manufacturers.
approved to this specification

Documents

Document Sharing Hub

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2. Recommended Conditions of Use and Associated Characteristics
(Not for inspection purposes)

These characteristics apply over the ambient operating temperature range unless otherwise stated.

			<u>Min.</u>	<u>Max.</u>	<u>Unit</u>
V_{CC}	Positive supply voltage	54136	4.5	5.5	V
		64136, 74136	4.75	5.25	V
I_{CC}	Total supply current per package at V_{CC} maximum.				
	Outputs open	54136	-	43.0	mA
		64136, 74136	-	50.0	mA
V_{IH}	HIGH state input voltage		2.0	5.5	V
V_{IL}	LOW state input voltage		-0.5	0.8	V
V_{OH}	HIGH state output voltage		-	5.5	V
V_{OL}	LOW state output voltage $I_{OL} = I_{OL} \text{ max.}$		-	0.4	V
$I_{IH(1)}$	HIGH state input current $V_{IN} = V_{IH} \text{ max.}$		-	1.0	mA
$I_{IH(2)}$	HIGH state input current $V_{IN} = V_{OH} \text{ min.}$		-	40.0	μ A
$-I_{IL}$	LOW state input current $V_{IN} = V_{OL} \text{ max.}$		-	1.6	mA
I_{OHX}	HIGH state output current (leakage)		-	250.0	μ A
I_{OL}	LOW state output current		-	16.0	mA
$-V_{IC}$	Input clamping voltage $-I_{IN} = 8.0 \text{ mA}$		-	1.5	V

2. Recommended Conditions of Use and Associated Characteristics (Cont'd)Switching Characteristics $V_{CC} = 5\text{ V}$, $T_{amb} = 25\text{ }^{\circ}\text{C}$, $C_L = 15\text{ pF}$, $R_L = 400\Omega$

		<u>Min.</u>	<u>Max.</u>	<u>Unit</u>
t_{PHL}	HIGH to LOW state propagation time from input A or B to output			
	Other input LOW	-	50.0	ns
	Other input HIGH	-	55.0	ns
t_{PLH}	LOW to HIGH state propagation time from input A or B to output			
	Other input LOW	-	18.0	ns
	Other input HIGH	-	22.0	ns

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FUNCTION TABLE

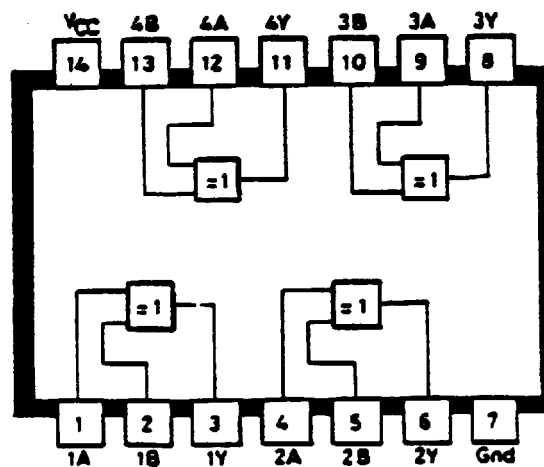
TABLE I

FUNCTION TABLE		
INPUTS		OUTPUT
A	B	Y
L	L	L
L	H	H
H	L	H
H	H	L

H = High-level, L = Low-level

PIN CONNECTION DIAGRAM

TABLE II



3. MARKING.

3.1 Each integrated circuit shall bear the following markings:

- (a) Terminal identification.
- (b) The manufacturer's type number.
- (c) The factory identification code, or manufacturer's trade mark.
- (d) The date code.

3.2 Each package containing one or more of these circuits shall bear the markings (b), (c) and (d) above and in addition:

- (e) The B.S. detail specification number.

4. RELATED DOCUMENTS.

- BS 2011 Basic environmental testing procedures.
- BS 3934 Dimensions of semiconductor devices.
- BS 6001 Sampling procedures and tables for inspection by attributes.
- BS 9000 General requirements for electronic components of assessed quality.
- BS 9400 Integrated electronic circuits of assessed quality: Generic data and methods of test.
- PD 9002 Qualified Products List for electronic components of assessed quality.

5. ORDERING INFORMATION.

Orders for these integrated circuits shall contain the following minimum information:

Manufacturer's integrated circuit type and package identification
as detailed in PD 9002 to BS 9401. F ____ as defined below -

TYPE		APPLICATION CATEGORY				FULL ASSESSMENT LEVEL
		S1	S2	S3	S4	
CERAMIC Dual-in-line and Flatpack	54136	F1181	F1182	F1183	F1184	F1185
	64136	*	F1186	F1187	F1188	F1189
	74136	*	F1190	F1191	F1192	F1193
PLASTIC Dual-in-line	64136	*	*	*	*	F1185
	74136	*	*	*	*	F1193
		*	*	*	*	

Notes: * Not available at present.