

UTE

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CECC 90 101-026

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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 46

Adoptée le 16 novembre 1987

BS9420 F040 to F042

BS9420 F058 to F060

BS9420 F104 to F110

Issue 2

April, 1977

DESSIN ET DIMENSIONS :
OUTLINE AND DIMENSIONS :

CEI 191-2 - Types 050 G 09 - 050 G 08
IEC 191-2 -

Référence française : F 117 - F 117A
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 75**REGISTRE A 4 ELEMENTS BINAIRES****QUAD LATCH**

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 :

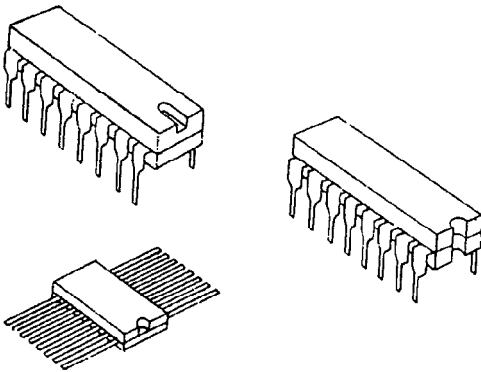
AMENDMENTS TO THE FOLLOWING CLAUSES

- § 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.

**Documents**

Document Sharing Hub

BRITISH STANDARDS INSTITUTION 2, PARK STREET, LONDON, W1A 2BS	BS 9420 F040 to F042 BS 9420 F058 to F060 BS 9420 F104 to F110 ISSUE 2, APRIL 1977
ELECTRONIC COMPONENTS OF ASSESSED QUALITY: DETAIL SPECIFICATION	
Outlines not to scale  For details dimensions: 16 Lead Flat-Pack — see Appendix I 16 Lead Dual in-Line — BS 3934 SO-87C	SILICON MONOLITHIC TTL QUAD LATCH FULL ASSESSMENT LEVEL AND APPLICATION CATEGORIES S1, S2, S3 and S4 TYPES 5475 6475 7475 See Clause 5 CERAMIC/GLASS HERMETICALLY SEALED ENCAPSULATION OR DUAL-IN-LINE PLASTIC ENCAPSULATION

1. Limiting conditions of use (not for inspection purposes)

Absolute Values (non-simultaneous)				Units
V_{CC}	Maximum continuous positive supply voltage		7.0	V
	Maximum continuous negative supply voltage		0.5	V
	Maximum continuous positive input voltage		5.5	V
	Maximum continuous negative input voltage		0.5	V
$-I_{IL}$	Maximum input current	(G input)	6.4	mA
		(D input)	3.2	mA
	Maximum reverse input current		1.0	mA
T_{amb}	Ambient operating temperature range	5475	-55 to +125°C	
		6475	-40 to + 85°C	
		7475	0 to + 70°C	
T_{stg}	Storage temperature range		-65 to +150°C	
	Shock (0.5 ms duration)		14 700	m/s ²
	Vibration		196	m/s ²

Copies of this specification are available from manufacturers
 listed in the Qualified Products List Part 1, of PD 9002.

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2. Recommended conditions of use and associated characteristics (not for inspection purposes)

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

			Min.	Max.	Units
V_{CC}	Positive supply voltage	5475	4.5	5.5	V
		6475 & 7475	4.75	5.25	V
V_{IH}	HIGH state input voltage	5475	2.0	5.5	V
		6475 & 7475	2.0	5.25	V
I_{CC}	Total supply current per package	5475		46.0	mA
		6475 & 7475		53.0	mA
V_{OH}	HIGH state output voltage		2.4		V
V_{IL}	LOW state input voltage		0	0.8	V
V_{OL}	LOW state output voltage			0.4	V
$I_{IH} (1)$	HIGH state input current at, $V_{IN} = V_{IH}$ maximum value			1.0	mA
$I_{IH} (2)$	HIGH state input current at, $V_{IN} = 2.4V$	D input		80.0	μA
		G input		160.0	μA
$-I_{IL}$	LOW state input current at, $V_{IN} = 0.4V$	D input		3.2	mA
		G input		6.4	mA
I_{OL}	LOW state output current			16.0	mA
$-I_{OH}$	HIGH state output current			400.0	μA
$-I_{OS}$	Output short-circuit current	5475	20.0	57.0	mA
		6475 & 7475	18.0	57.0	mA
t_{PHL}	HIGH to LOW state propagation time at $25^{\circ}C^*$			25.0	ns
t_{PLH}	LOW to HIGH state propagation time at $25^{\circ}C^*$			40.0	ns
$t_{p(enable)}$	Duration of enable pulse		20.0	—	ns
$t_{(set up)}$	Minimum set-up time with respect to negative edge of enable pulse		20.0	—	ns
$t_{(hold)}$	Minimum hold time with respect to negative edge of enable pulse		5.0	—	ns

*See Subgroup A4 for details

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Table I

Function Table (each Latch)

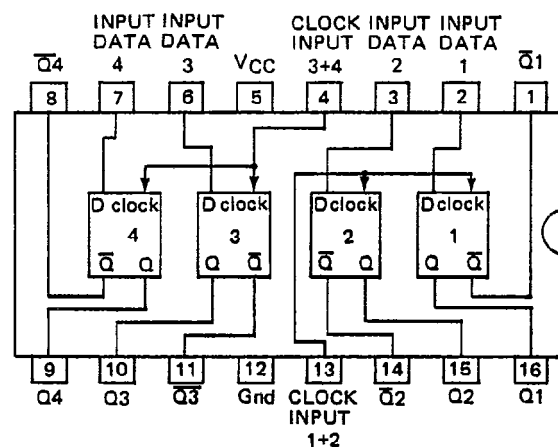
INPUTS		OUTPUTS	
D	G	Q output	$\bar{Q}$ output
L	H	L	H
H	H	H	L
X	L	Q_0	$\bar{Q}_0$

Q_0 = The level of Q before the HIGH-to-LOW transition of G

X = Logic state irrelevant

Table II.

Logic diagram and connections



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3. Marking

- (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
- (2) Each package containing one or more of these circuits shall bear the markings b, c and d above and in addition
 - e. The BS detail specification number. Example BS 9420 F059

4. Related documents

BS 3934 'Dimensions of semiconductor devices'
BS 6001 'Sampling procedures and table for inspection by attributes'
BS 9000 'General requirements for electronic components of assessed quality'
PD 9002 'Qualified products list for electronic components of assessed quality'
BS 9400 'Integrated electronic circuits of assessed quality: Generic data and methods of test'

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 9420 F ... as defined below.

TYPE		APPLICATION CATEGORY				FULL ASSESSMENT LEVEL
		S1	S2	S3	S4	
CERAMIC Dual-in-line and Flat-Pack	5475	F058	F059	F060	F104	F040
	6475	*	F105	F106	F107	F041
	7475	*	F108	F109	F110	F042
PLASTIC Dual-in-line	5475	*	*	*	*	F040
	6475	*	*	*	*	F041
	7475	*	*	*	*	F042

*=Not available at present