

Errata to **DL136/D Rev. 4** **Communications Device Data**

July 19, 1996

This errata applies to the following sections of DL136/D, Rev. 4, Q1/96:

- Functional Selection Guide
- MC13142, Low Power DC – 1.8 GHz LNA, Mixer and VCO
- MC13155, Wideband FM IF
- MC14497, PCM Remote Control Transmitter
- MC44107, IR Remote Control Transmitter
- MC34017, Telephone Tone Ringer
- MC145170–1, PLL Frequency Synthesizer with Serial Interface
- MC145402, Serial 13–Bit Linear Codec (A/D and D/A)
- MC145436A, Low–Power Dual Tone Multiple Frequency Receiver
- MC145480, 5 V PCM Codec–Filter
- MC145574, ISDN S/T Interface Transceiver II
- MC145583, 3.3 V Only Driver/Receiver with an Integrated Standby Mode
- MC68HC68T1 Real–Time Clock plus RAM with Serial Interface
- Package Dimension, 940C–02
- Package Dimension, 873A–02

The following pages have been amended. Please take the time to make a permanent note of these changes in your book. In addition, the following data sheets have been revised and reprinted as standalone documents. They are available through the Literature Distribution Center, the MFax system, and the Motorola SPS World Wide Web site. (See last page for addresses and information.) These documents are: MC34017/D, MC145170–1/D, MC145436A/D, MC145574TS/D, MC145583/D, and MC68HC68T1/D.

Functional Selection Guide

Page:

1–5 MC145170–1 function should read: “PLL Frequency Synthesizer with Serial Interface (185 MHz)”.

MC13142 Low Power DC – 1.8 GHz LNA, Mixer and VCO

Page:

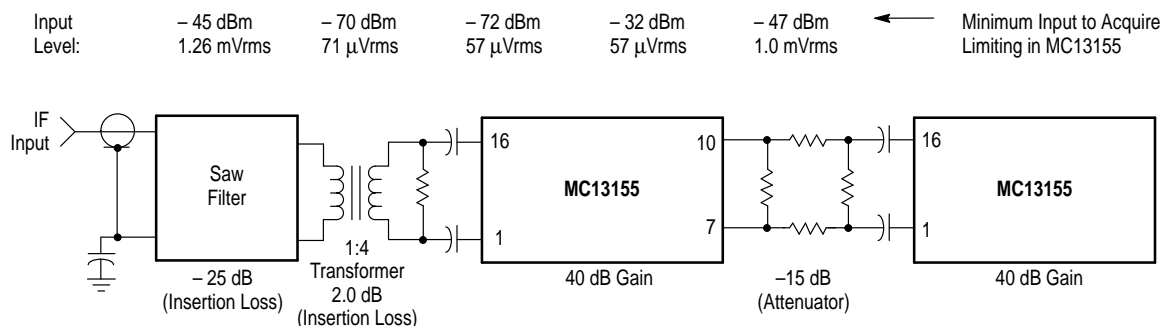
2–180 Referencing the pin connections for SO–16, Pins 9, 10, and 11 should be changed as follows:
Pin 9 — V_{EE}, Pin 10 — IF–, Pin 11 — IF+.

MC13155 Wideband FM IF

Page:

2-186 The Block Diagram should appear as follows:

Block Diagram of 70 MHz Video Receiver Application Circuit



MC14497 PCM Remote Control Transmitter

Page:

2-271 Referencing the E9 Row Input (Pin 3) paragraph, all three references to "Table NO TAG" should be replaced with "Table 1".

MC34017 Telephone Tone Ringer

A revised data sheet (MC34017/D) is available.

Page:

2-479 Pages 2-479 through 2-482 are incorrect. See new data sheet for corrected information.

MC44107 IR Remote Control Transmitter

Page:

2-557 Referencing the Pin Assignment, Pin 20 should be changed to V_{DD} .

MC145170-1 PLL Frequency Synthesizer with Serial Interface

A revised data sheet (MC145170-1/D) is available.

Page:

2-748 Referencing the Operating Supply Current, replace "TBD" with the following:
 0.6 mA @ 3 V, 30 MHz
 1.5 mA @ 3 V, 100 MHz
 3.0 mA @ 5 V, 50 MHz
 5.8 mA @ 5 V, 185 MHz

2-750 The guaranteed limit for I_{IN} for the f_{IN} pin should be $\pm 150 \mu A$.

The test condition for I_{DD} should read:

$f_{IN} = 500 \text{ mV p-p}$; $OSC_{IN} = 1 \text{ MHz @ } 1 \text{ V p-p}$; $f_R, f_V, REF_{out} = \text{Inactive and No Connect}$; $OSC_{out}, \phi_V, \phi_R, PD_{out}, LD = \text{No Connect}$; $D_{in}, ENB, CLK = V_{DD} \text{ or } V_{SS}$

Referencing V_{DD} V for I_{DD} , "5.0" should be replaced with "—".

Note ** should read:

The nominal value at 3 V is 0.6 mA @ 30 MHz and 1.5 mA @ 100 MHz. The nominal value at 5 V is 3.0 mA @ 50 MHz and 5.8 mA @ 185 MHz.

MC145402 Serial 13–Bit Linear Codec (A/D and D/A)

Page:

2–914 The following package has been added to the device: DW Suffix, SOG Package, Case 751G.
The ordering information should now include MC145402DW, SOG Package.

MC145436A Low–Power Dual Tone Multiple Frequency Receiver

A revised data sheet (MC145436A/D) is available.

Page:

2–986 The following sentence should be added at the end of the paragraph for Guard Time:
If left open, this pin is internally pulled to ground.

MC145480 5 V PCM Codec–Filter

The MC145480 has been replaced by the MC14LC5480. See new data sheet (MC14LC5480/D) for information.

MC145574 ISDN S/T Interface Transceiver

A revised technical summary (MC145574TS/D) is available. The package corrections are shown here, but several other changes were incorporated into the new revision.

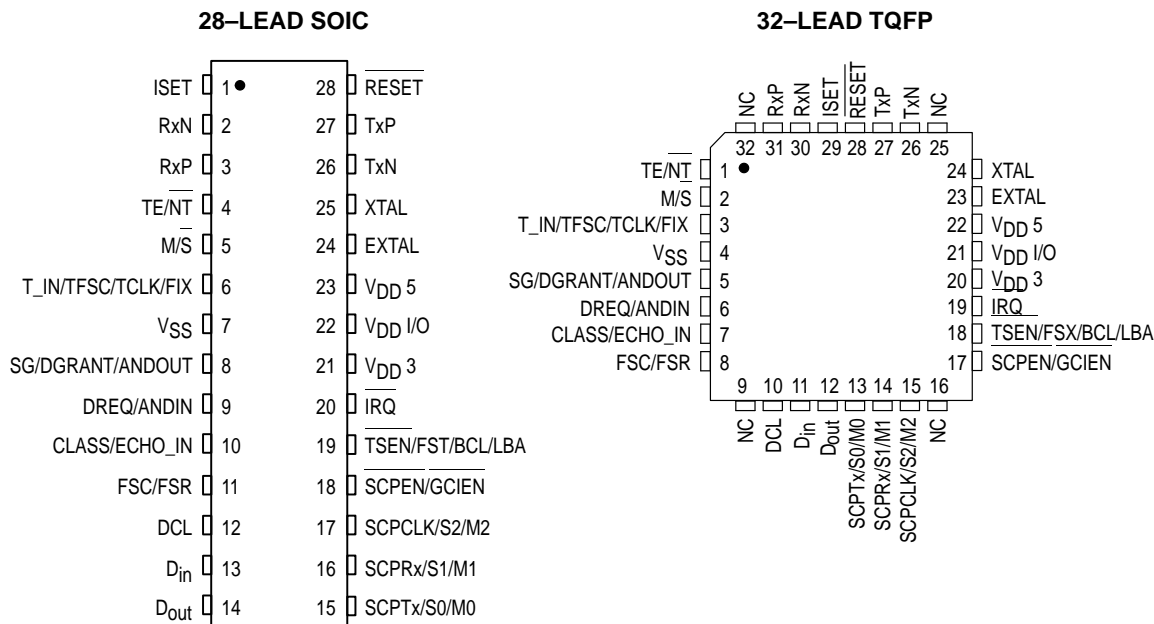
Page:

2–1195 The package information should be changed to read: DW Suffix, SOG Package, Case 751F; and PB Suffix, TQFP, Case 873A.

The ordering information should be changed to read: MC145574DW, SOG Package; and MC145574PB, TQFP.

2–1196 The pin assignments should be changed to the following:

PIN ASSIGNMENTS



MC145574 ISDN S/T Interface Transceiver (continued)

Page:

2-1197 The Power Dissipation table should be replaced with the following:

POWER DISSIPATION ($T_A = -40$ to $+85^\circ\text{C}$, $V_{DD5} = 5.0\text{ V} \pm 5\%$, Voltages referenced to V_{SS} and V_{DDIO} connected to V_{DD5})

Characteristic	Min	Typ	Max	Unit
DC Supply Voltage	4.75	5	5.25	V
Worst Case Power Consumption**	—	60*	90	mW
Transmit Power Down	—	50*	70	mW
Sleep Mode	—	0.5*	4	mW
Absolute Minimum Power Down	—	0.1*	2	mW

* These values have been measured on some sampled devices from several lots at 25° and $V_{DD} = 5\text{ V}$.

** While sending and receiving 96 kHz signal on S/T interface.

MC145583 3.3 Volt Only Driver/Receiver with an Integrated Standby Mode (EIA-232-E and CCITT V.28)

A revised data sheet (MC145583/D) is available.

Page:

2-1217 The following package has been added to the device: DW Suffix, SOG Package, Case 751F.
The ordering information should now include MC145583DW, SOG Package.

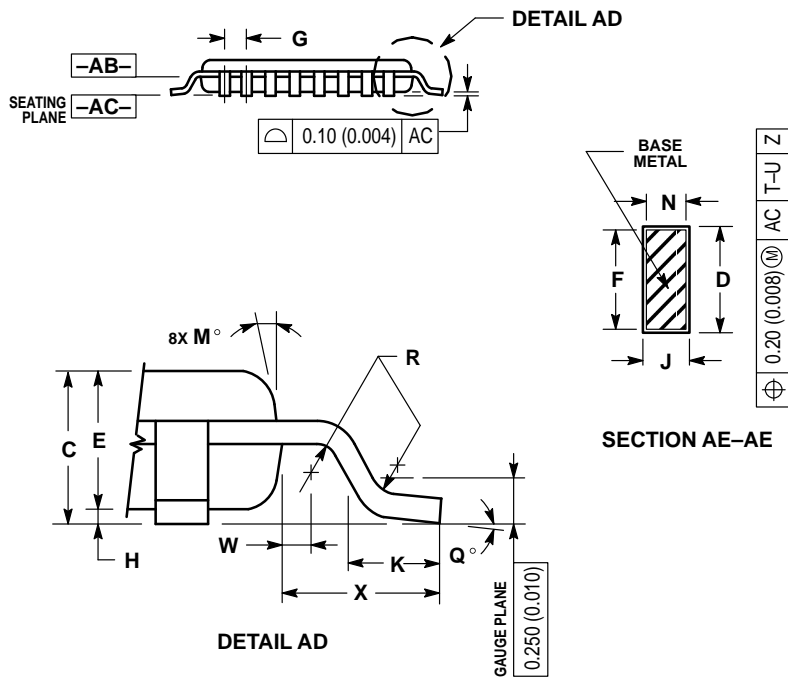
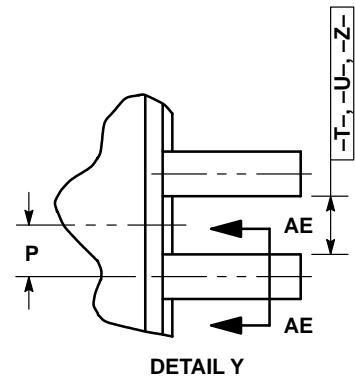
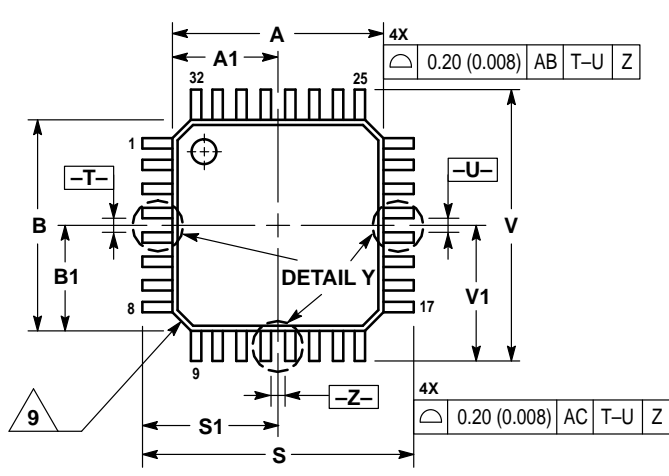
MC68HC68T1 Real-Time Clock plus RAM with Serial Interface

A revised data sheet (MC68HC68T1/D) is available.

Package Dimension 873A-02

Page:

8-12 The package dimension for Case 873A-02 (PB Suffix) should be added to the mechanical section. This corresponds with MC145574, ISDN S/T Interface. The package is as follows:



- NOTES:
- DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 - CONTROLLING DIMENSION: MILLIMETER.
 - DATUM PLANE -AB- IS LOCATED AT BOTTOM OF LEAD AND IS COINCIDENT WITH THE LEAD WHERE THE LEAD EXITS THE PLASTIC BODY AT THE BOTTOM OF THE PARTING LINE.
 - DATUMS -T-, -U-, AND -Z- TO BE DETERMINED AT DATUM PLANE -AB-.
 - DIMENSIONS S AND V TO BE DETERMINED AT SEATING PLANE -AC-.
 - DIMENSIONS A AND B DO NOT INCLUDE MOLD PROTRUSION. ALLOWABLE PROTRUSION IS 0.250 (0.010) PER SIDE. DIMENSIONS A AND B DO INCLUDE MOLD MISMATCH AND ARE DETERMINED AT DATUM PLANE -AB-.
 - DIMENSION D DOES NOT INCLUDE DAMBAR PROTRUSION. DAMBAR PROTRUSION SHALL NOT CAUSE THE D DIMENSION TO EXCEED 0.520 (0.020).
 - MINIMUM SOLDER PLATE THICKNESS SHALL BE 0.0076 (0.0003).
 - EXACT SHAPE OF EACH CORNER MAY VARY FROM DEPICTION.

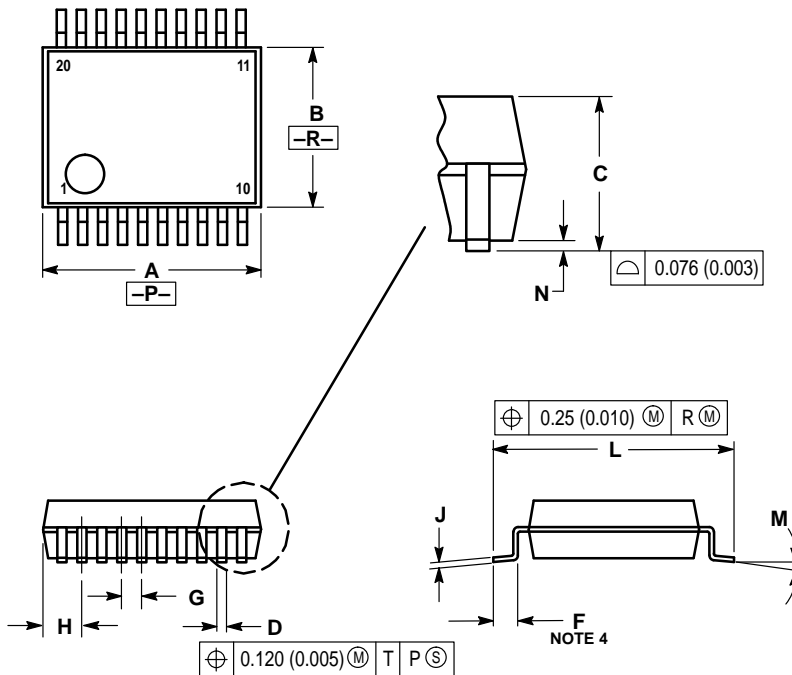
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	7.000	BSC	0.276	BSC
A1	3.500	BSC	0.138	BSC
B	7.000	BSC	0.276	BSC
B1	3.500	BSC	0.138	BSC
C	1.400	1.600	0.055	0.063
D	0.300	0.450	0.012	0.018
E	1.350	1.450	0.053	0.057
F	0.300	0.400	0.012	0.016
G	0.800	BSC	0.031	BSC
H	0.050	0.150	0.002	0.006
J	0.090	0.200	0.004	0.008
K	0.500	0.700	0.020	0.028
M	12°	REF	12°	REF
N	0.090	0.160	0.004	0.006
P	0.400	BSC	0.016	BSC
Q	1°	5°	1°	5°
R	0.150	0.250	0.006	0.010
S	9.000	BSC	0.354	BSC
S1	4.500	BSC	0.177	BSC
V	9.000	BSC	0.354	BSC
V1	4.500	BSC	0.177	BSC
W	0.200	REF	0.008	REF
X	1.000	REF	0.039	REF

Package Dimension 940C-02

Page:

8-12

The package dimension for Case 940C-02 (SD Suffix) should be added to the mechanical section. This does **not** replace Case 940C-03 (VF Suffix). The package is as follows:



- NOTES:
1. CONTROLLING DIMENSION: MILLIMETER.
 2. DIMENSIONS AND TOLERANCES PER ANSI Y14.5M, 1982.
 3. DIMENSIONS A AND B DO NOT INCLUDE MOLD FLASH OR PROTRUSIONS AND ARE MEASURED AT THE PARTING LINE. MOLD FLASH OR PROTRUSIONS SHALL NOT EXCEED 0.15MM PER SIDE.
 4. DIMENSION IS THE LENGTH OF TERMINAL FOR SOLDERING TO A SUBSTRATE.
 5. TERMINAL POSITIONS ARE SHOWN FOR REFERENCE ONLY.
 6. THE LEAD WIDTH DIMENSION DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.08MM TOTAL IN EXCESS OF THE LEAD WIDTH DIMENSION.

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	7.10	7.30	0.280	0.287
B	5.20	5.38	0.205	0.212
C	1.75	1.99	0.069	0.078
D	0.25	0.38	0.010	0.015
F	0.65	1.00	0.026	0.039
G	0.65 BSC		0.026 BSC	
H	0.59	0.75	0.023	0.030
J	0.10	0.20	0.004	0.008
L	7.65	7.90	0.301	0.311
M	0° 8°		0° 8°	
N	0.05	0.21	0.002	0.008

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USA/EUROPE/Locations Not Listed: Motorola Literature Distribution; P.O. Box 20912; Phoenix, Arizona 85036. 1-800-441-2447 or 602-303-5454

JAPAN: Nippon Motorola Ltd.; Tatsumi-SPD-JLDC, 6F Seibu-Butsuryu-Center, 3-14-2 Tatsumi Koto-Ku, Tokyo 135, Japan. 03-81-3521-8315

MFAX: RMFAX0@email.sps.mot.com – TOUCHTONE 602-244-6609
INTERNET: http://Design-NET.com

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