Advance Information

MPC7457TRXNXPNS
Rev. 0, 5/2004

MPC7457 Part Number Specification for the MPC74x7TRXnnnnNx Series

Part Numbers Affected:

MC7457TRX1000NC
MC7457TRX733NC
MC7447TRX1000NB
MC7447TRX733NB

This document describes part-number-specific changes to recommended operating conditions and revised electrical specifications, as applicable, from those described in the general *MPC7457 RISC Microprocessor Hardware Specifications* (Order No. MPC7457EC). The MPC7457 and MPC7447 are implementations of the PowerPC™ microprocessor family of reduced instruction set computer (RISC) microprocessors.

Specifications provided in this document supersede those in the *MPC7457 RISC Microprocessor Hardware Specifications*, Rev. 2 or later, for the part numbers listed in Table A only. This document is primarily concerned with the MPC7457; however, unless otherwise noted, all information herein also applies to the MPC7447 part numbers listed in Table A. Specifications not addressed herein are unchanged. Because this document is frequently updated, refer to http://www.motorola.com/semiconductors or to your Motorola sales office for the latest version.

Note that headings and table numbers in this document are not consecutively numbered. They are intended to correspond to the heading or table affected in the general hardware specification.

Part numbers addressed in this document are listed in Table A.

Table A. Part Numbers Addressed by this Data Sheet [1]

Motorola Part Number	Operating Conditions			Significant Differences from Hardware Specification
	CPU Frequency (MHz)	V_{DD}	T_j (°C)	
MC7457TRX733NC	733	1.1 V ± 50 mV	–40 to 105	Modified core frequency and voltage to reduce power consumption, modified processor bus AC timing, extended temperature range.
MC7457TRX1000NC	1000			
MC7447TRX733NB	733			
MC7447TRX1000NB	1000			

1 Operating conditions applicable to full-power mode only. Other modes require different core voltage, junction temperature, and core frequency specifications.

1.11 Ordering Information

1.11.1 Part Numbers Addressed by This Specification

Table 22 provides the ordering information for the MPC7457 parts described in this document.

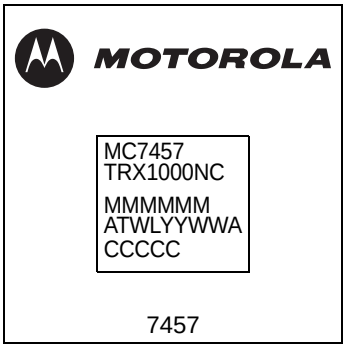
Table 22. Part Marking Nomenclature

xx	74*x*7	x	RX	*nnnn*	*x*	*x*
Product Code	**Part Identifier**	**Process Descriptor**	**Package**	**Processor Frequency[1]**	**Application Modifier**	**Revision Level**
MC	7457	T: –40 to 105°C	RX = CBGA	1000	N: 1.1 V ± 50 mV	C: 1.2: PVR = 8002 0102
				733		
MC	7447	T: –40 to 105°C	RX = CBGA	1000	N: 1.1 V ± 50 mV	B: 1.1: PVR = 8002 0101
				733		

Notes:
1. Processor core frequencies supported by parts addressed by this specification only. Parts addressed by other specifications may support other maximum core frequencies.

1.11.3 Part Marking

Parts are marked as the example shown in Figure 29.



Notes:
MMMMMM is the 6-digit mask number.
ATWLYYWWA is the traceability code.
CCCCC is the country of assembly. This space is left blank if parts are assembled in the United States.

Figure 29. Motorola Part Marking for BGA Devices

Document Revision History

Table B provides a revision history for this part number specification.

Table B. Document Revision History

Rev. No.	Date	Substantive Change(s)
0	05/20/2004	Initial release.

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