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# 8XC51FC SPECIFICATION UPDATE 

Release Date: July, 1996
Order Number 272881-001

The 8XC51FC may contain design defects or errors known as errata. Characterized errata that may cause the 8XC51FC's behavior to deviate from published specifications are documented in this specification update.

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The 8XC51FC may contain design defects or errors known as errata. Current characterized errata are available on request.
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## REVISION HISTORY

| Date of Revision | Version | Description |
| :---: | :---: | :--- |
| $07 / 01 / 96$ | 001 | This is the new Specification Update document. It contains all <br> identified errata published prior to this date. |

## PREFACE

As of July, 1996, Intel's Semiconductor Products Group has consolidated available historical device and documentation errata into this new document type called the Specification Update. We have endeavored to include all documented errata in the consolidation process, however, we make no representations or warranties concerning the completeness of the Specification Update.
This document is an update to the specifications contained in the Affected Documents/Related Documents table below. This is the first release of the 8XC51FC Specification Update. This document is a compilation of device and documentation errata, specification clarifications and changes. It is intended for hardware system manufacturers and software developers of applications, operating systems, or tools.

Information types defined in Nomenclature are consolidated into the specification update and are no longer published in other documents.
This document may also contain additional information that was not previously published.

Affected Documents/Related Documents

| Title | Order |
| :--- | :---: |
| Embedded Microcontrollers | $270646-007$ |
| MCS $^{\circledR}$-51 Microcontroller Family User's Manual | $272383-001$ |

## Nomenclature

Errata are design defects or errors. These may cause the published (component, board, system) behavior to deviate from published specifications. Hardware and software designed to be used with any component, board, and system must consider all errata documented.

Specification Changes are modifications to the current published specifications. These changes will be incorporated in any new release of the specification.

Specification Clarifications describe a specification in greater detail or further highlight a specification's impact to a complex design situation. These clarifications will be incorporated in any new release of the specification.

Documentation Changes include typos, errors, or omissions from the current published specifications. These changes will be incorporated in any new release of the specification.

## NOTE:

Errata remain in the specification update throughout the product's lifecycle, or until a particular stepping is no longer commercially available. Under these circumstances, errata removed from the specification update are archived and available upon request. Specification changes, specification clarifications and documentation changes are removed from the specification update when the appropriate changes are made to the appropriate product specification or user documentation (datasheets, manuals, etc.).

## SUMMARY TABLE OF CHANGES

The following table indicates the errata, specification changes, specification clarifications, or documentation changes which apply to the 8XC51FC product. Intel may fix some of the errata in a future stepping of the component, and account for the other outstanding issues through documentation or specification changes as noted. This table uses the following notations:

## Codes Used in Summary Table

## Steps

| X: | Errata exists in the stepping indicated. Specification Change or Clarification that applies to this stepping. |
| :---: | :---: |
| (No mark) |  |
| or (Blank box): | This erratum is fixed in listed stepping or specification change does not apply to listed stepping. |
| Page |  |
| (Page): | Page location of item in this document. |
| Status |  |
| Doc: | Document change or update will be implemented. |
| Fix: | This erratum is intended to be fixed in a future step of the component. |
| Fixed: | This erratum has been previously fixed. |
| NoFix: | There are no plans to fix this erratum. |
| Eval: | Plans to fix this erratum are under evaluation |
| Row |  |
| 1 | Change bar to left of table row indicates this erratum is either new or modified from the previous version of the document. |

## Errata

| No. | Steppings |  |  | Page | Status | ERRATA |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |
|  | A\# | B\# | $\#$ |  |  |  |
| 9600001 | X | -- |  | 7 | Fixed | Port Anomaly |

## Specification Changes

| No. | Steppings |  |  | Page | Status | SPECIFICATION CHANGES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\#$ | $\#$ | $\#$ |  |  |  |
|  |  |  |  |  |  | None for this revision of this specification update. |

## Specification Clarifications

| No. | Steppings |  |  | Page | Status | SPECIFICATION CLARIFICATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\#$ | $\#$ | $\#$ |  |  |  |
|  |  |  |  |  |  | None for this revision of this specification update. |

## Documentation Changes

| No. | Document Revision | Page | Status | DOCUMENTATION CHANGES |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | None for this revision of this specification update. |

IDENTIFICATION INFORMATION

## Markings

Special identifier of fab7 and B-stepping for (i) PDIP \& PLCC package with marking FFFFFFFFFA and (ii) MQFP package with marking [M] [C] ' 80 B

## ERRATA

## 9600001. Port Anomaly

PROBLEM: The strong pullups in Ports 1, 2, and 3 will not turn on by the reset function. Therefore, if any of these port pins is at a low state before a reset is applied, it may take several oscillator periods to be pulled up. The strong pullups will still turn on for 2 oscillator periods when a 1 is written to the port pins.

IMPLICATION : Additional oscillator periods are required for pullups after reset.
WORKAROUND: A clean and easy workaround is to write 0 s to all ports followed by OFFH in the beginning of the program.

MOV P1,\#0
MOV P1,\#0FFH
MOV P2,\#0
MOV P2,\#0FFH
MOV P3,\#0
MOV P3,\#0FFH
STATUS: Refer to Summary Table of Changes to determine the affected stepping(s).
AFFECTED PRODUCTS: A-step devices.

## SPECIFICATION CHANGES

None for this revision of this specification update.

## SPECIFICATION CLARIFICATIONS

None for this revision of this specification update.

## DOCUMENTATION CHANGES

None for this revision of this specification update.

