



ACC/ATCA-7221/MEM-2GB- DDR2

Installation Guide

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About this Manual

Overview of Contents

This Installation Guide is intended for users qualified in electronics or electrical engineering. Users must have a working understanding of AdvancedTCA and telecommunications.

Abbreviations







This document uses the following abbreviations:

Abbreviation	Definition
EMC	Electromagnetic Compatibility
EN	European Norm
ESD	Electrostatic Sensitive Device
FCC	Federal Communications Commission
S.M.A.R.T.	Software Maintenance and Reference Tool

Conventions

The following table describes the conventions used throughout this manual.

Notation	Description
0x00000000	Typical notation for hexadecimal numbers (digits are 0 through F), for example used for addresses and offsets
0b0000	Same for binary numbers (digits are 0 and 1)
bold	Used to emphasize a word
Screen	Used for on-screen output and code related elements or commands in body text
Courier + Bold	Used to characterize user input and to separate it from system output
<i>Reference</i>	Used for references and for table and figure descriptions
File > Exit	Notation for selecting a submenu
<text>	Notation for variables and keys
[text]	Notation for software buttons to click on the screen and parameter description

Notation	Description
...	Repeated item for example node 1, node 2, ..., node 12
.	Omission of information from example/command that is not necessary at the time being
..	Ranges, for example: 0..4 means one of the integers 0,1,2,3, and 4 (used in registers)
	Logical OR
  <pre> XX XX XX </pre>	Indicates a hazardous situation which, if not avoided, could result in death or serious injury
  <pre> XX XX XX </pre>	Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury
 <pre> XX XX XX </pre>	Indicates a property damage message
 <pre> XX XX XX </pre>	No danger encountered. Pay attention to important information

Summary of Changes

Order No.	Rev.	Date	Description
227562	AA	April 2006	First version of Installation Guide
6806800F06A		March 2008	Update document to Emerson style (logo, copyright, etc.)

Comments and Suggestions

We welcome and appreciate your comments on our documentation. We want to know what you think about our manuals and how we can make them better.

Mail comments to us by filling out the following online form:

<http://www.emersonnetworkpowerembeddedcomputing.com/> > Contact Us > Online Form

In "Area of Interest" select "Technical Documentation". Be sure to include the title, part number, and revision of the manual and tell us how you used it.

Safety Notes

This section provides safety precautions to follow when installing, operating, and maintaining the product.

We intend to provide all necessary information to install and handle the product in this manual. However, as the product is complex and its usage manifold, we do not guarantee that the given information is complete. If you need additional information, ask your Emerson representative.

The product has been designed to meet the standard industrial safety requirements. It must not be used except in its specific area of office telecommunication industry and industrial control.

Only personnel trained by Emerson or persons qualified in electronics or electrical engineering are authorized to install, remove or maintain the product. The information given in this manual is meant to complete the knowledge of a specialist and must not be taken as replacement for qualified personnel.

Installation

Damage of Circuits

Electrostatic discharge and incorrect module installation and removal can damage circuits or shorten their life.

Before touching the module or electronic components, make sure that you are working in an ESD-safe environment.

Replacement/Expansion

Only replace or expand components or system parts with those recommended by Emerson. Otherwise, you are fully responsible for the impact on EMC or any possible malfunction of the product.

>Environment

Always dispose of used modules according to your country's legislation, if possible in an environmentally acceptable way.

Sicherheitshinweise

Dieser Abschnitt enthält Sicherheitshinweise, die bei Installation, Betrieb und Wartung des Produkts zu beachten sind.

Wir sind darauf bedacht, alle notwendigen Informationen, die für die Installation und den Betrieb erforderlich sind, in diesem Handbuch bereit zu stellen. Da es sich jedoch um ein komplexes Produkt mit vielfältigen Einsatzmöglichkeiten handelt, können wir die Vollständigkeit der im Handbuch enthaltenen Informationen nicht garantieren. Falls Sie weitere Informationen benötigen sollten, wenden Sie sich bitte an die für Sie zuständige Geschäftsstelle von Emerson.

Das Produkt erfüllt die für die Industrie geforderten Sicherheitsvorschriften und darf ausschließlich für Anwendungen in der Telekommunikationsindustrie und im Zusammenhang mit Industriesteuerungen verwendet werden.

Installation, Wartung und Betrieb dürfen nur von durch Emerson ausgebildetem oder im Bereich Elektronik oder Elektrotechnik qualifiziertem Personal durchgeführt werden. Die in diesem Handbuch enthaltenen Informationen dienen ausschließlich dazu, das Wissen von Fachpersonal zu ergänzen, können es aber in keinem Fall ersetzen.

Installation

Beschädigung von Schaltkreisen

Elektrostatische Entladung und unsachgemäßer Ein- und Ausbau des Moduls kann Schaltkreise beschädigen oder ihre Lebensdauer verkürzen.

Bevor Sie das Modul oder elektronische Komponenten berühren, vergewissern Sie sich, daß Sie in einem ESD-geschützten Bereich arbeiten.

Austausch/Erweiterung

Verwenden Sie bei Austausch oder Erweiterung nur von Emerson empfohlene Komponenten und Systemteile. Andernfalls sind Sie für mögliche Auswirkungen auf EMV oder Fehlfunktionen des Produktes voll verantwortlich.

Umweltschutz

Entsorgen Sie alte Module stets gemäß der in Ihrem Land gültigen Gesetzgebung, wenn möglich immer umweltfreundlich.

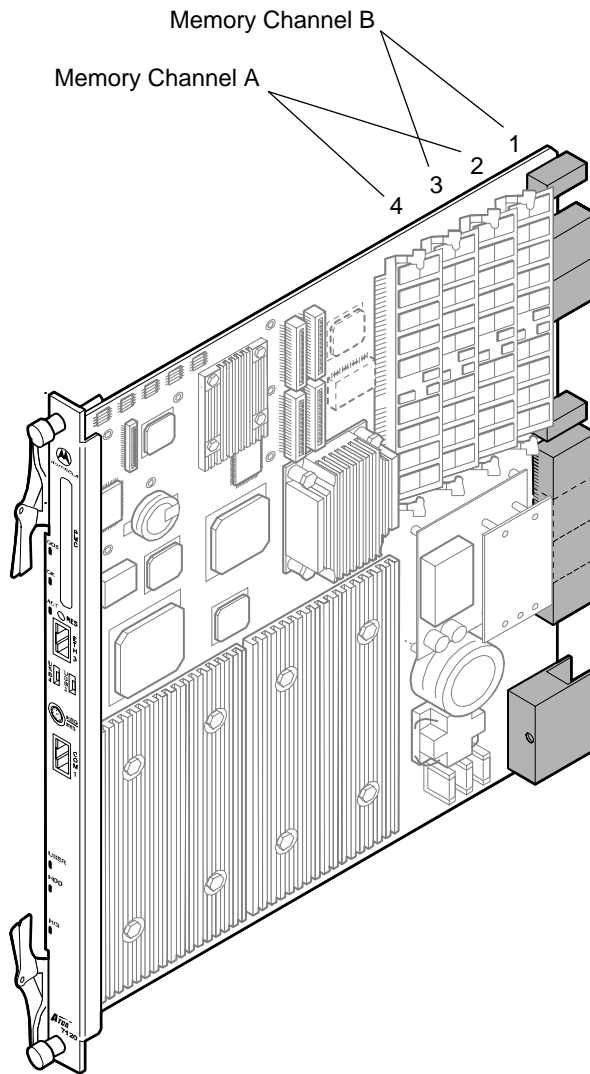
1.1 Features

The ACC/ATCA-7221/MEM-2GB-DDR2 memory expansion module provides an easy way to upgrade the PENT/ATCA-7221 with two GByte additional DDR2 main memory. The ACC/ATCA-7221/MEM-2GB-DDR2 comes delivered as accessory kit consisting of one DIMM memory module and this manual.

2.1 Memory Module Installation

The blade provides two memory channels. The following figure illustrates how they are assigned to the four on-board DIMM module sockets.

Figure 2-1 Location of DIMM Module Slots



When installing DIMM memory modules, the DIMM sockets farthest away from the MCH device need to be populated first. Allowable population options depend also on whether one or two memory channels are used. The following table shows possible DIMM module population options.

Table 2-1 Allowable DIMM Module Population Options

Populated DIMM Sockets	Number of Memory Channels
1+3	1
1+2	2
1+2+3+4	2



DIMM modules used within one channel must be based on the same memory technology.

NOTICE

Damage of Circuits

Electrostatic discharge and incorrect module installation and removal can damage circuits or shorten their life.

Before touching the module or electronic components, make sure that you are working in an ESD-safe environment.

Installation Procedure

1. Remove blade from system as described in the blade's Reference Guide
2. Open locks of memory module socket
3. Press module carefully into socket
As soon as the memory module has been fully inserted, the locks automatically close
4. If applicable, repeat steps 2 to 3 to install further modules

2.2 Memory Module Removal

NOTICE

Damage of Circuits

Electrostatic discharge and incorrect module installation and removal can damage circuits or shorten their life.

Before touching the module or electronic components, make sure that you are working in an ESD-safe environment.

Removal Procedure

1. Remove blade from system as described in the blade's Reference Guide
2. Open locks of socket at both sides
The memory module is automatically lifted up
3. Remove module from socket
4. Repeat steps 2 to 3 in order to remove further memory modules



A.1 Emerson Network Power - Embedded Computing Documents

The Emerson Network Power - Embedded Computing publications listed below are referenced in this manual. You can obtain electronic copies of Emerson Network Power - Embedded Computing publications by contacting your local Emerson sales office. For documentation of final released (GA) products, you can also visit the following website:

<http://www.emersonnetworkpowerembeddedcomputing.com> > Resource Center > Technical Documentation Search. This site provides the most up-to-date copies of Emerson Network Power - Embedded Computing product documentation.

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