

Select the package which is right for you!

The previous pages present how the Technosoft tools help you to accelerate your DMC development.

Hardware elements can be obtained separately.

Upgrades of the different kits are possible.

For more information about our tools or for functional demos of the software please contact us or consult our WEB page www.technosoft.ch.

If you have any questions about our offer, please do not hesitate to contact of our offices.



The table below provides an overview about the available packages.

DSP Development Tools, Overview, Packages

| Elements \ Packages | Tools for TMS320F243 | | | | | Tools for TMS320F240 | | | | |
|--|----------------------|--------|------------|-------------------|--------------|----------------------|---------------|--------------|-------------------|--------------|
| | MSK243 Base Kit | MCK243 | MSK243 Pro | MC-K243 Kit C Pro | MCK243 Kit D | MCK240 | MC-K240 Kit A | MCK240 Kit C | MC-K240 Kit C Pro | MCK240 Kit D |
| Kits designed for | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| MSK243 DSP Board | ■ | ■ | ■ | ■ | ■ | | | | | |
| Monitor and PC Communication | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| PROCEV - Processor Evaluation | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| MCK240 DSP Board with on-board power amplifier | | | | | | ■ | ■ | ■ | ■ | ■ |
| DSPmot - DSP Motion Evaluation | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Brushless Motor, 20W | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| PM50: Power Module for MCK243 | | ■ | ■ | ■ | ■ | | | | | |
| DMCD Debugger Lite | ■ | | | | | | | | | |
| DMCD Debugger | | | | | | | ■ | ■ | | |
| DMCD Debugger Pro | | | ■ | ■ | ■ | | ■ | ■ | ■ | ■ |
| DMCS (tuning toolbox) | | | ■ | ■ | ■ | | ■ | ■ | ■ | ■ |
| C-compiler, Assembler/Linker | | | ■ | ■ | ■ | | ■ | ■ | ■ | ■ |
| ACPM750, 3-phase IGBT Power Module | | | | | | | | ■ | ■ | ■ |
| RDIM16 Resolver to Digital Converter | | | | | | | | ■ | ■ | ■ |
| IB-240 I/O Interface Board | | | | | ■ | | | | | ■ |
| Brushless Motor, 230VAC, 370W | | | | | | | | | | ■ |
| Induction Motor, 230VAC, 370W | | | | | | | | | | ■ |

■ Kits for DSP evaluation
 ■ Development platform, w/o C-Compiler/Ass./Linker
 ■ Development platforms and packages
 □ Upon request

TECHNO SOFT SA
 Via Aldesago 1
 CH-6977 RUVIGLIANA
 Switzerland
 Phone: +41 (0) 91 976 0501
 Fax: +41 (0) 91 976 0502

Technosoft US Inc.
 1942 County Road 39
 Southampton, NY 11968
 Phone: 516 287 9898
 Fax: 516 287 9897

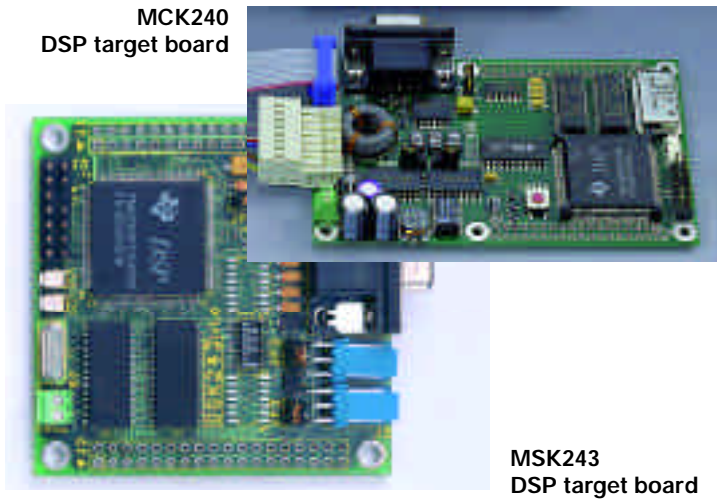
For more info:
 web site:
www.technosoft.ch
 e-mail:
contact@technosoft.ch



DIGITAL MOTION CONTROL DEVELOPMENT TOOLS FOR THE TMS320 F240 AND F243

Rapid access to DSP Technology for Digital Motion Control Applications

The TMS320C24x family of Texas Instruments is specifically optimized for motion control and represents a breakthrough for digital motor control applications. It combines high performance math processing with integrated motor control peripherals including CAN controller on one chip. Consequently, reduced system cost can be achieved as less hardware components are required.



Technosoft, specialized in DSP based real time control, offers a complete range of development and evaluation tools for implementation of digital motor control with the TMS320C24x DSP family.

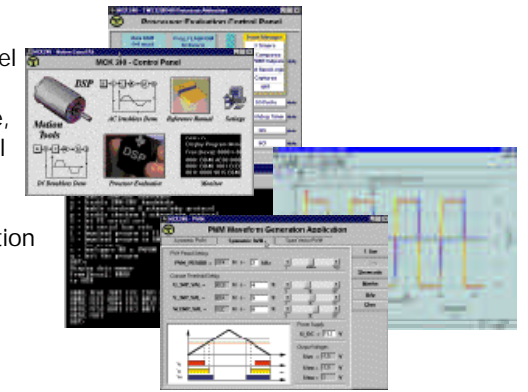
These tools offer a user oriented development environment to:

- Evaluate**
the specific functionalities of the TMS320C24x DSP controller family
- Download and execute**
through serial communication programs complete motor control applications
- Execute**
ready to run examples on the basis of prototyping hardware
- Develop/debug**
using an integrated development environment, advanced debugging features, reference and trace functions
- Parameterize**
digital motor control structures (controller tuning)
- Analyse**
through user friendly graphical interfaces the results of real time implementation (scope function) debugging features, reference and trace functions
- Test**
different control algorithms for various electrical machines
- Implement**
and validate on experimental power modules up to 2.2kW

Advanced Graphical Tools for rapid access to Digital Motion Control with DSP

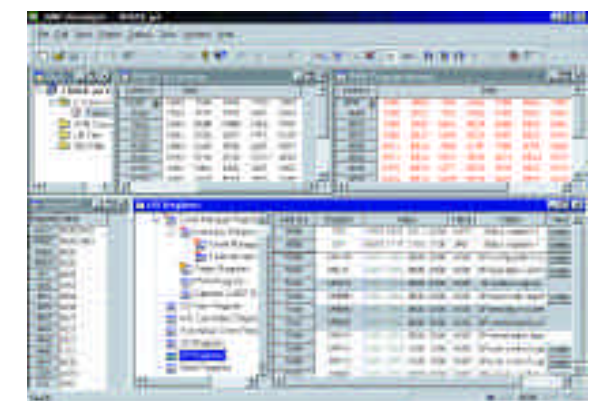
All of the Technosoft development tools are fully loaded with graphical features. They provide rapid access to the DSP technology and Digital Motor Control alike and speed up your design considerably.

This starts with the evaluation level using the MCWIN software package, which offers serial communication with the DSP processor evaluation and running examples to demonstrate the capacity of the processor.



At the development level, the graphical integrated Digital Motor Control Developer tools speed up your development.

The DMCD Pro version handles your development projects, provides editing and debugging features, real time implementation, step by step or break-point execution and allows by reference and trace functions the development of your design in logical steps. Access to the real movement is provided through the scope function.



TECHNOSOFT development tools for Digital Motor Control Applications

The following overview describes briefly all the elements and tools provided by Technosoft to speed up your Digital Motion Control application

DSP Hardware and Software elements

MSK243 DSP Board

- TMS320F243 DSP controller with 8kWords of flash EPROM
- 32 k words 0 wait state SRAM external data/program memory
- RS 232, CAN 2.0 and J-TAG interfaces
- I/O Motion Control bus (MC-bus) for power modules, ex. PM50

MCK240 DSP Board

- TMS320F240 DSP controller with 16k words of flash EPROM
- 32 k words 0 wait state SRAM external data/program memory
- RS 232 and J-TAG interfaces
- On board three phase amplifier
- Standard I/O Motion Control bus (MC-bus) for power modules

MCK240/MSK243 PC Communication

- MON 240/3 F240/3 monitor program written in Flash memory
- MONPC240/3 PC monitor program for serial communication
- MCK240/MSK243.DLL PC library for communication

PROCEV 240 / 243

Processor evaluation with ready to run program examples (PWM, I/O, timers, communication functions)

DSPMOT Advanced Graphical for motion applications development

- Graphical reference generator
- Motion data logger and loader
- Graphical real time data display (Scope function)

DMCD Digital Motor Control Developer LITE

Basic debugger for MSK243 base kit incorporated Technosoft assembler level debugger, watch windows memory and I/O registers view / modify integrated source code editor with powerful programming options

DMCD Digital Motor Control Developer

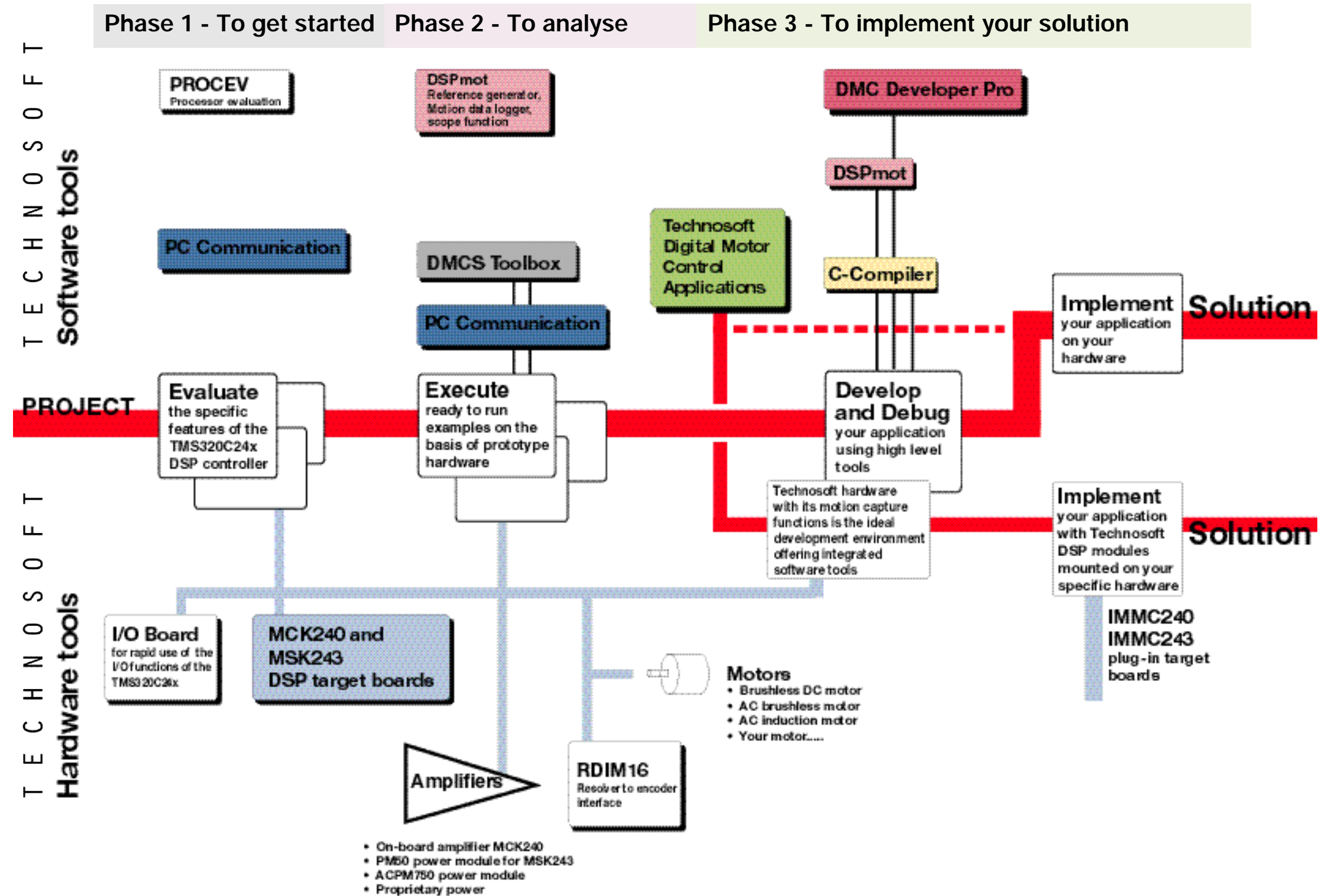
- incorporated C and assembler level debugger, watch windows
- memory and I/O registers view / modify
- integrated source code editor with powerful programming options
- integrated Technosoft assembler / linker
- integrated graphical analysis interface -trace function and reference generator (Pro version)

DMCS Digital Motor Control Solutions Toolbox

- selection and implementation of pre-defined control schemes with motion structure parameterization
- tuning of controllers parameters
- real time implementation and data logging (scope function) and reference generator (Pro version)

IMMC240, IMMC243 DSP Plug-in Modules

for direct implementation of your application to an industrial target hardware. Please inquire for our complete brochures.



Hardware extension modules

1. **ACPM750 - 3 phase IGBT Power Module for AC Motors**
750W, 230V, 4 A, IGBT power module for brushless and induction motors, MC-Bus compatible
2. **PM50 - 3 phase MOSFET Power Module**
3 phases MOS-FET inverter, 30V, 1,7A, directly connectable to the MSK243 DSP board through MC-Bus, Encoder and Hall sensors interface,
3. **Brushless Motor 20W**
High dynamic brushless motor, suitable to test your DMC application with a low power system. Suitable for MCK240 on-board power module and PM50
4. **RDIM16 Resolver to Digital converter**
Interface with R to D converter, MC-Bus compatible
5. **IB-240 I/O Evaluation Board**
Provides test platform for I/O signal testing for PWM signals, analogue inputs, capture inputs, general pur-pose inputs (MC-Bus compatible)
6. **Induction Motor**
370W, 230VAC, with encoder feedback
7. **Brushless Motor**
370W, 230VAC with encoder and hall sensor or resolverfeedback



TECHNOSOFT

www.technosoft.ch

TECHNOSOFT DIGITAL MOTOR CONTROL

Development Tools for the TMS320F240 DSP Controller

Overview

| Part Number | Description |
|-------------|---|
| 24TKI00011 | MCK240 Motion Control Kit <ul style="list-style-type: none">• MCK240 board with TMS320F240 and on-board 3-phase inverter• MCWIN graphical motion software package• User manual• Reference Manuals for TMS320C24x• Brushless motor with Hall sensors and 500 lines encoder |
| 24TKI00111 | MCK240 Professional Kit A and A Pro* <ul style="list-style-type: none">• MCK240 DSP Motion Control Kit• DMCD Digital Motion Control Developer/debugger• DMCD Pro Integrated developing software/debugger with reference and trace functions (A Pro only) |
| 24TKI00311 | MCK240 Professional Kit C <ul style="list-style-type: none">• MCK240 DSP Motion Control Kit• DMCD Digital Motion Control Developer/debugger• TI C-Compiler, Assembler/Linker (TMS320C2x/C2xx/C5x) |
| 24TKI00312 | MCK240 Professional Kit C Pro <ul style="list-style-type: none">• MCK240 DSP Motion Control Kit C but with• DMCD Pro Integrated developing software/debugger with reference and trace functions |
| 24TKI00411 | DSP Motion Control Development Package (Kit D) <ul style="list-style-type: none">• MCK240 Professional Kit C Pro• ACPM750, 3-phase IGBT Power Module• RDIM16 Resolver to Digital Interface Module• IB-240, I/O evaluation board• DMCS Digital Motor Control Solution Toolbox for AC motors |
| | Separate Options |
| 24PCM0002 | IMMC240-SC-M Industrial target hardware, programmed with serial communication monitor |
| 24TGN00011 | IB-240, I/O Evaluation Board to access and evaluate I/O features of TMS320F24x |
| 24TAN00111 | ACPM750, 3-phase IGBT Power Module for AC motors, 220V, 4A , 750 Watts rated power |
| 24TGN00111 | RDIM16, Resolver to Digital Interface Module interface for AC motors with resolver feedback |
| 24TSS00011 | DMCS, Digital Motor Control Solution Toolbox Evaluation tool for AC motor control |
| ASPMN00011 | 370W, 230 VAC Induction motor with Encoder Feedback |
| SYPMN00011 | 370W, 230VAC Brushless Motor with encoder feedback and hall sensors |
| SYPMN00012 | 370W, 230VAC Brushless Motor with resolver feedback |

All software tools are compatible with IMMC24x DSP plug-in modules

Hardware is also compatible with TI tools

New
DSP solutions
for digital
motor control



TECHNOSOFT DIGITAL MOTOR CONTROL

Development Tools for the TMS320F243 DSP Controller

Price List

| Part Number | Description |
|-------------|---|
| 24TKI30001 | MSK243 Base Kit <ul style="list-style-type: none">• MSK243 board with TMS320F243, 32 kB 0-wait state RAM, JTAG and RS-232 interface• Monitor software for serial communication• DMCD Lite debugging software with basic assembler/linker• Processor evaluation software• User manual• Reference Manuals for TMS320C24x |
| 24TKI30011 | MCK243 Motion Control Teaching Kit <ul style="list-style-type: none">• MSK243 board with TMS320F243, 32 kB 0-wait state RAM, JTAG and RS-232 interface• Monitor software for serial communication• Processor evaluation software• MCWIN graphical motion software package• IP50, 3-phase amplifier bridge• Brushless motor with Hall Sensors and 500 line encoder• User manual• Reference Manuals for TMS320C2x |
| 24TKI30003 | MSK243 Pro <ul style="list-style-type: none">• MSK243 Base Kit• DMCD Pro Integrated developing software/debugger with reference and trace functions |
| 24TKI30012 | MCK243 Professional Kit C Pro <ul style="list-style-type: none">• MCK243 Motion Control Teaching Kit• DMCD Pro Integrated developing software/debugger with reference and trace functions• TI C-Compiler, Assembler/Linker (TMS320C2x/C2xx/C5x) |
| 24TKI300013 | MCK243 DSP Motion Control Development Package (Kit D) <ul style="list-style-type: none">• MCK243 Professional Kit C Pro• ACPM750, 3-phase IGBT Power Module• RDIM16, Resolver to Digital Interface Module• IB-240, I/O evaluation board• DMCS, Digital Motor Control Solution Toolbox for AC motors |
| | Separate Options |
| 24PCM3002 | IMMC243-SC-M Industrial target hardware, programmed with serial communication monitor |
| 24TGN00011 | IB-240, I/O Evaluation Board to access and evaluate I/O features of TMS320F24x |
| 24TAN00111 | ACPM750 3-phase IGBT Power Module for AC motors, 220V, 4A , 750 Watts rated power |
| 24TGN00111 | RDIM16, Resolver to Digital Interface Module interface for AC motors with resolver feedback |
| 24TSS00011 | DMCS, Digital Motor Control Solution Toolbox Evaluation tool for AC motor control |
| ASPMN00011 | 370W, 230 VAC Induction motor with Encoder Feedback |
| SYPMN00011 | 370W, 230VAC Brushless Motor with encoder feedback and hall sensors |
| SYPMN00012 | 370W, 230VAC Brushless Motor with resolver feedback |

All software tools are compatible with IMMC24x DSP plug-in modules

Hardware is also compatible with TI tools

TECHNOSOFT SA
Via Aldesago 1
CH-6977 RUVIGLIANA
Switzerland
Phone: +41 91 976 0501
Fax +41 91 976 0502

TECHNOSOFT US Inc.
1942 County Road 39
Southampton, NY 11968
Phone: 516 287 9898
Fax: 516 287 9897

For more info:
web site: www.technosoft.ch
e-mail:
contact@technosoft.ch