

softMC703 High-performance Multi-axis Controller



Open, modular software environment



Highly real-time Linux operating system



Ethernet machine interface



EtherCat fieldbus



Controls up to 64 axes



Extensive capabilities for standard and non-standard Robotic kinematics



IEC 61131-3 (IL, ST, LD, FBD, SFC) and CFC editors (Codesys)

MC-Basic programming language (Control Studio)

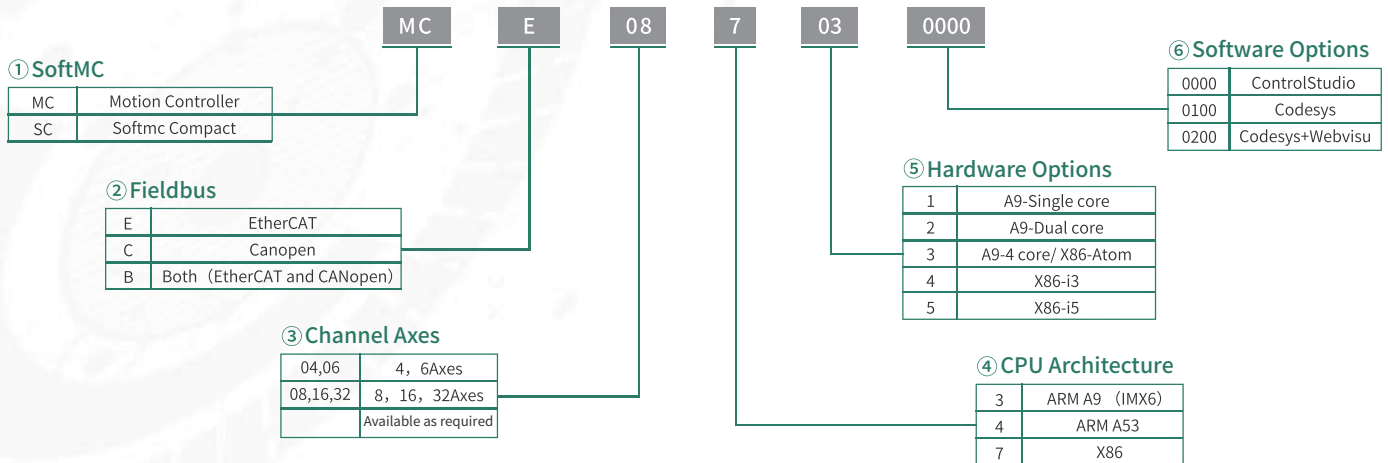


Support multiple communication protocols



Customized software solutions

Product Naming Rules



Technical Parameters

System	
CPU	1.33 GHz Intel Atom Bay-Trail - IE3825 dual-core processor
RAM	DDR3L SDRAM 2GB memory
Storage	mSATA 2 GB (internal)
Ethernet port	3x Intel GbE EtherCAT: RJ45 port for real-time motion control; LAN: RJ45 port for host communication; AUX Ethernet: RJ45 port for demonstrator HMI and others
USB	Mini-USB
COM 1&2	RS485 port
VGA	D15 pin interface

Environment/Installation	
Installation method	Installed via DIN guide rail
Operating temperature	0° C - 45° C
Dimensions	30 mm x 106 mm x 85 mm (W x H x D)
Certification	CE

Programming Software

Codesys is a feature-rich software, Programming is carried out via PLCopen-compliant IEC 61131-3 function blocks. It supports C/C++ for software engineers, so you can choose the most suitable language for program development. It has a human-machine interface and provides a trend chart for continuous data recording. It also supports motion control functions, such as point-to-point motion, cam table, multi-axis interpolation (G code), and robot coordinate conversion.

Support Communication

Protocols

Modbus TCP

Modbus RTU

RS485

OPC UA

TCP/IP

Support Motion Control Function

- Single-axis/multi-axis motion (movement, inching)
- Master-slave (camming, gearing)
- Acceleration curve settings (trapezoid, sin, quadratic spline)
- G code (programming in DIN 66025)
- Hybrid motion
- Simulated motion (offline program simulation)
- User-definable scalar units (m, inch, mm/s and rpm)
- Support 3D compensation table
- Conveyor tracking
- Robotic kinematics for standard and non-standard types
- Advanced spatial interpolation for all kinematics
- Robot dynamics model (identification and online dynamic reversal)
- Real-time robot impact detection
- A single controller controls multiple robots to move simultaneously