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GUC-ECAT Motion controller
-- High performance motion controller + PC + EtherCAT Technology

Overview

The GUC-ECAT series motion controller which is compatible with EtherCAT Technology, can synchronously control up to 64 axes and supports standard IEC61131-3. Due to its high computation speed and supports large number of IOs, the controller is widely used in different demanding industries.

GUC-ECAT provides low cost solution to equipment manufacturer. Clients can select EtherCAT modules from different manufacturers to build different systems. With the help of development platform: OtoStudio, user can greatly reduce the development time due to its sufficient function libraries.
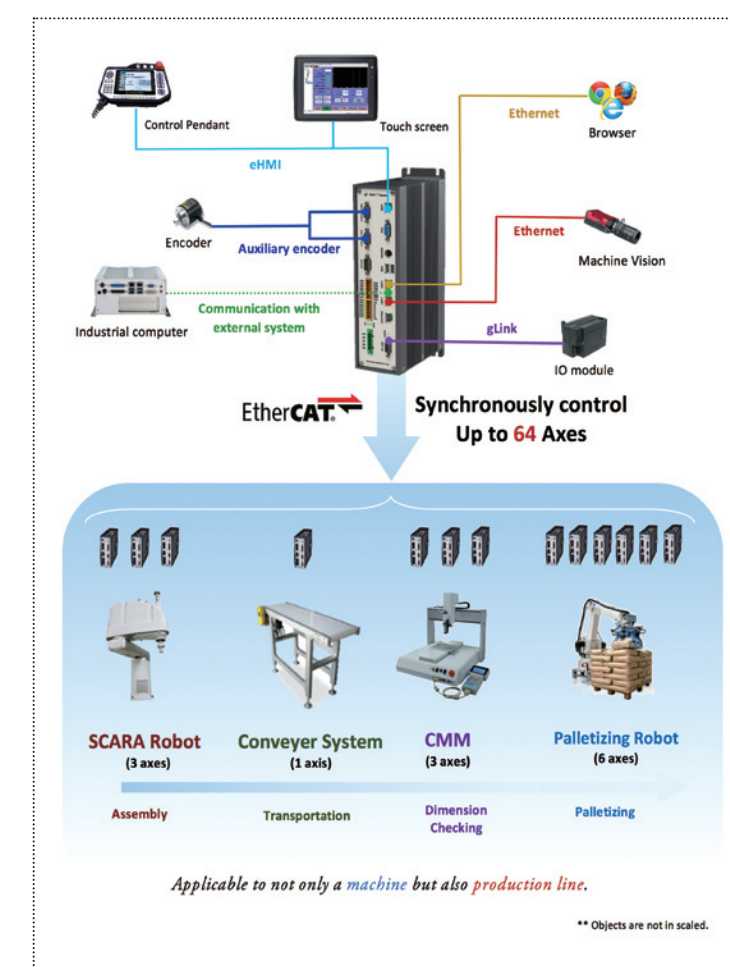
By using GUC-ECAT controller, fewer cables are needed. It thus helps clients to easy wiring and reduces maintenance cost.

Main Features

- Shortest control period can reach 250uS
- Development platform fully supports OtoStudio programming environment of IEC61131-3 standard
- Support remote diagnosis and analysis via Ethernet
- Human Machine Interaction support eHMI interface
- Provide low cost I/O module solution via gLink bus (Googol trademark)
- Two-channel encoder interface,support incremental or absolute encoder, can be configured to support synchronous function of multiple GUC-ECAT controller
- Equip with encrypted chip design for software protection and end user payment control (optional)
- Power failure protection solution (optional)

System Layout

GOOGOL TECHNOLOGY
Control & network factories of the future

GOOGOLTECH

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GUC-ECAT Motion controller
-- The best choice for those who requires high speed and multi-axis

Specifications

Features	Descriptions
Hardware Configuration	
CPU	Intel Atom processor, 1.66GHz
Hard drive	4GB
RAM	2GB DDR3
Display	VGA and eHMI*
USB	USB 2.0X 2
Keyboard and mouse	KB/MS 2 in 1 port
Network	RJ45 X 2 (10/100/1000Mbps self-adaptive)
RS 232	RS 232 X 1
OS	WinCE 6.0
Support protocol	EtherCAT 1 X RJ45 100Mbps gLink 1DB9F 6.125Mbps
Function List	
Maximum no. of control axis	Up to 64 axes
Development environment	OtoStudio**
Motion control function	Point to Point motion, Jog motion, PT/ PVT motion, Electronic gear/cam mode, Linear interpolation mode, Arc Interpolation mode, Compensation algorithm
PLC function	IEC61131-3 control kernel EtherCAT bus I/O module gLink bus I/O module
Digital I/O	8 channels 24V high voltage active or 0V Low voltage active
Analog I/O	6 channels input, 2 channels output. Voltage range: ± 10V Resolution:12bits
Encoder	2-channel Configurable incremental and absolute encoder (Can be used for synchronous control among multiple controllers)
General Features	
Voltage	24VDC ± 10%
Current	3A (minimum)
Operating temperature	0 – 55 oC
Humidity	5%-90%, no condensation
Dimension	296 X 160 X 77mm

* eHMI is a high speed and stable interface using for the communication between the controller and touch panel. The maximum length of the eHMI cable is 100M. Using RJ45 connector, user can easily make the cable with simple hand tool.

** The development platform OtoStudio is based on IEC61131-3 programming standard, users can use instruction list, ladder diagram, function block diagram, structure text and sequential function chat to do programming. For more details, please refer to the CPAC catalog or contact Googol Technology.

Ordering Guide

Model No.	Descriptions		Picture
Standard Package			
CPAC-OtoBox-UCTN2-ECAT-064-M23	Motion Controller X 1, PS/2 cable X 1, Product CD X1		
Servo Drive			
GTHD-0032AEC2	220V	Output current 3A	
GTHD-0062AEC2		Output current 6A	
GTHD-0132AEC2		Output current 13A	
GTHD-0242AEC2		Output current 24A	
GTHD-0034DEC2	380V	Output current 3A	
GTHD-0064DEC2		Output current 6A	
GTHD-0124DEC2		Output current 12A	
Power Supply			
ACC-DC24	24V DC power supply		
Touch Screen			
ACC6-PN3-05	5 inch touch screen		
ACC6-PN3-12	12 inch touch screen		
ACC6-PN3-15	15 inch touch screen		
Cables			
CABLE-eHMI/RJ45-DB9F-3M	3m eHMI cable		
CABLE-eHMI/RJ45-DB9F-6M	6m eHMI cable		
CABLE-eHMI/RJ45-DB9F-10M	10m eHMI cable		

Applications

Robot, textile and weaving, flying shears, printing, packaging, semiconductor, medical equipment,automatic production line and other industries.

GUC-ECAT