

GUC-L3 Series Embedded Motion Controller

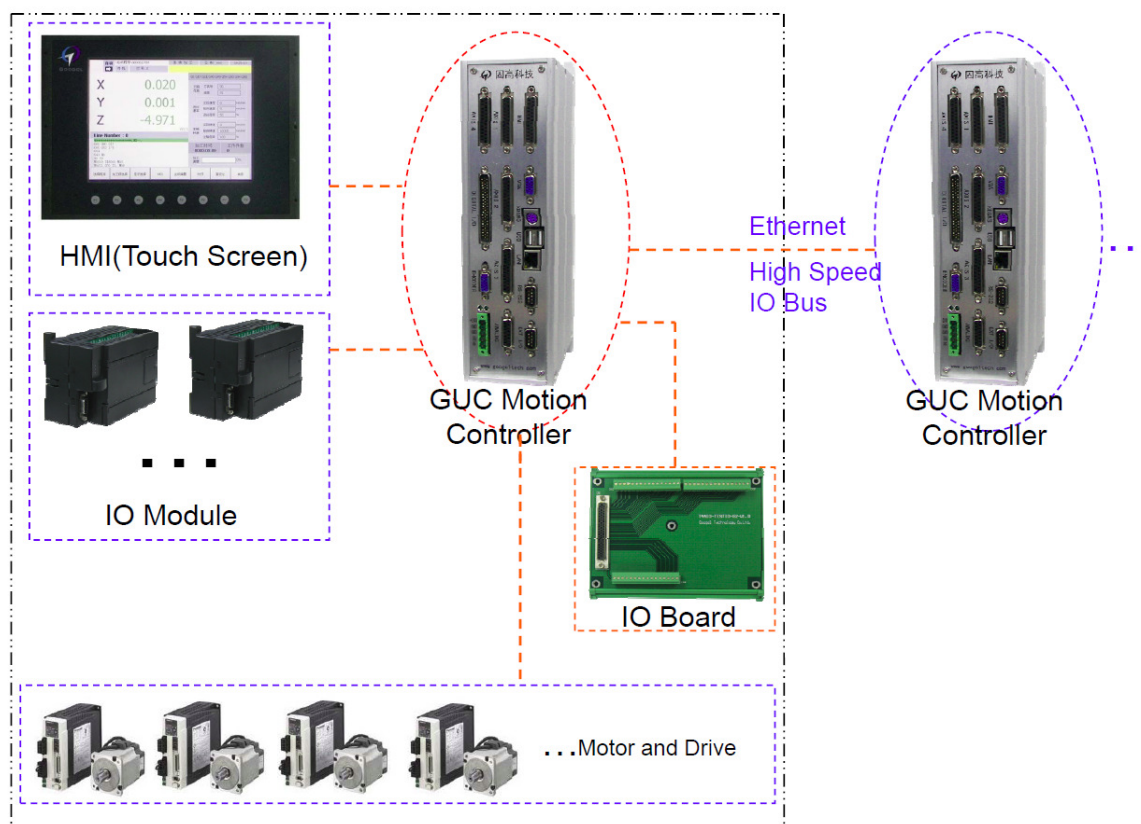
Overview

GUC-400-ESV/SG-M01(M02)-L3 are embedded controllers with both PC functions and motion control functions. The motion control part is using Googol Technology's GE series controller architecture. The advantages of this type of motion controller are the great performance in continuous trajectory control as well as the velocity look-ahead function. The PC part of the controller is designed based on industrial PC. OS like Dos, WinCE, WinXP could be the operation system on the embedded controller. The GUC-L3 type of motion controller has better integration than GUC-L2 since the terminal board is directly integrated into the controller. The integration of industrial PC and motion controller has better performance in anti-interference ability, reliability and stability than the old architecture by using plugged-in motion controller with PC. Also the cost-effectiveness of the embedded controller is another reason to choose. To be more flexible to use this controller, the IO extension is designed for machine with plentiful input/output channels. In addition, Human Machine Interface (HMI) and network IO extension modules are also provided as a one-stop solution.



GUC-L3 Series

System Configuration



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Applicable Fields

PCB industry, Engraving machines, CNCs, Cutting equipments such as Plasma Cutting, Flame Cutting, Dispenser Machine, laser applications, etc,

Specifications



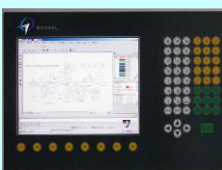

Industrial PC	<ul style="list-style-type: none"> ·CPU(Selectable): (M01) 600MHz (M02) 1GHz ·RAM: 256M ·Display: VGA、HMI ·Hard Drive(Selectable): DOM:1G, 2G, 4G, Hardisk:80G, 120G ·USB2.0 X 2 ·Keyboard Mouse: PS/2 ·RS232 X 1 ·Network: RTL8139, 10M/100M <p>Operating System(Selectable)</p> <ul style="list-style-type: none"> ·DOS (Recommend 1G DOM) ·WinCE (Recommend 1G DOM) ·Windows XP (Recommend 4G DOM)
Motion Control	<ul style="list-style-type: none"> ➤ Total 4 Axes motors control, for each axis: <ul style="list-style-type: none"> ➤ Pulse Output, Max Frequency: 1MHZ ➤ Analog Output(ESV model only): -10V ~ +10V; Accuracy: 16 Bits ➤ Encoder Feedback Channel ➤ Home and Index Hardware Capture ➤ Limit Sensors for Positive and Negative, Servo Alarm ➤ Motion Control Functions: <ul style="list-style-type: none"> ➤ Linear Interpolation, Circular Interpolation ➤ Methods of Interpolation: Immediately Interpolation, Buffered Interpolation ➤ Velocity Look-Ahead Function: Small Segments Velocity Profile Optimization ➤ Open Loop, Close Loop(ESV model only) ➤ Local IO Management in Buffer, Delay Motion Function ➤ Cut Following Function(Optional) ➤ Spiral Interpolation(Optional) ➤ Backlash Compensation and Pitch Compensation(Optional) ➤ Gantry Control Function(Optional)
Extension	<ul style="list-style-type: none"> ➤ Digital IO Module, AD/DA Module ➤ Googol Technology's HMI
Working Environment	<ul style="list-style-type: none"> ·Temperature: 0~55℃ ·Humidity: 5%~90%
Power	<ul style="list-style-type: none"> ·+18V- +36V ,Icc=3A MAX
Dimension (GUC)	<ul style="list-style-type: none"> ·296mm×160mm×75mm
Dimension (IO Board)	<ul style="list-style-type: none"> ·160mm × 108mm

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Ordering Guide

Item	Description	Model No.	No./Length
Standard Package	Stand-Alone Motion Controller	GUC-400-ESV-M01-L3	1
		GUC-400-ESG-M01-L3	
		GUC-400-ESV-M02-L3	
		GUC-400-ESG-M02-L3	
	IO Board	T4AIO-TESTIO-G2	1
	Cable	ACC3-A1-062015	2/1.5m

Optional Accessories

Cables	Controller to Terminal Board	ACC3-A1-062005	0.5m
		ACC3-A1-062030	3.0m
Cable for Motor Drive	Terminal Board to Drive (suitable for Panasonic MINUS A Series)	ACC5-D01005	0.5m
		ACC5-D01010	1.0m
		ACC5-D01015	1.5m
HMI			
	12'HMI ACC6-PN5-T15-K8		
		15'HMI ACC6-PN5-T15-K16	
IO Module	Digital IO Module	ACC-S1616D	
	Analog IO Module	ACC-S0208A	
		ACC-S0408A	

GOOGOL TECHNOLOGY (HONG KONG) LIMITED

RM 4605, ANNEX BLDG, HKUST

CLEAR WATER BAY, KLN, HK

TEL: +852 2358 1033

FAX: +852 2719 8399

EMAIL: SALES@GOOGOLTECH.COM (PRODUCTS ENQUIRY)

WEBSITE: [HTTP://WWW.GOOGOLTECH.COM.HK](http://WWW.GOOGOLTECH.COM.HK)

GOOGOL TECHNOLOGY (SHENZHEN) LIMITED

RM W211, IER BUILDING, SOUTH AREA

SHENZHEN HI-TECH INDUSTRIAL PARK

TEL: +0755 2697 0817

FAX: +0755 2697 0846

EMAIL: GOOGOL@GOOGOLTECH.COM (PRODUCTS ENQUIRY)

WEBSITE: [HTTP://WWW.GOOGOLTECH.COM.CN](http://WWW.GOOGOLTECH.COM.CN)