

8 Axes Point To Point Motion Controller

Overview

Based on 32-bit “Blackfin” DSP + FPGA architecture, Googol Tech’s GTS-800 series motion controller grand the machine with more efficiency in motion control as well as in programmable resources. The new GTS series motion controller could realize T-Curve, S-Curve, PT(Position-Time profiling), E-Gear, E-Cam functions with more accuracy and better performance.



Application Areas

1. Multi-profiling functions with the accuracy and repeatability for high speed motion control ensure the fulfillment of the advanced machine performance in Wire-Bond, Die-Bond, PCB Drilling etc.
2. PT Profiling:
 - A. Applicable to Robotic Arm Motion Planning, making the programming in robotics easier.
 - B. Small segment interpolation function can be implemented. Applicable to point to point motion application with simple interpolation function. For example, PCB drilling.
 - C. User defined velocity profiling function can be implemented. Enrich the customization ability of the control system and complicated velocity profile is possible with this function.
3. E-CAM and E-Gear can be applied to multiple area for the synchronization functions, like cut on fly, packaging, advanced printing, sewing machine, etc.
4. Linear motor control with high performance.

Technical Specifications

Motion Control Functions	Hardware: <ul style="list-style-type: none">• Up to 8 axes servo/stepper motors control• Close loop for PV type• Up to 1MHZ pulse• 32-bit incremental encoder reading• Support INDEX, HOME hardware capture
	Software: <ul style="list-style-type: none">• 125us control cycle (configurable)• Support Point to Point, PT, E-gear, E-Cam, Jog• Configurable IOs through software• Support 32 downloadable logic programs, save more CPU resources for user, increase the real time ability of the system.• Support soft limits.• Support gantry mode• With actual position and planned position flags for different positioning judgment.• “PID+Vff+Aff” adapted control + digital filter
Software	Library files and sample programs under Windows CE, Windows XP
Interface	PCI Bus
Dimension	122mm×185mm

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Power	<ul style="list-style-type: none"> ● $\pm 5V$, $I_{cc}=2A$ Supplied by PCI ● $\pm 12V$, $I_{cc}=60mA$ Supplied by PCI
Working Environment	<ul style="list-style-type: none"> ● Temperature: $0\sim 55^{\circ}C$

Ordering Guide

Model No.	No. of Axis	Motor	Motion Mode
GT-800-PV-PCI-G	8	Velocity/Position Analog/Pulse	Point to Point, PT, E-gear, E-Cam, Jog
GT-800-PG-PCI-G	8	Position Pulse	Point to Point, PT, E-gear, E-Cam, Jog

Packing List

	Part Name	Description	Qty
Standard	Motion Controller	GT-800-PV-PCI-G/GT-800-PG-PCI-G	1
	Interface Board	GT-800-PCI-ACC1+64pin Flat Cable	1
	Terminal Board	GT2-800-ACC2-V/GT2-800-ACC2-G	1
	SCSI Cable	68pin \cdot 1.5/3.0 M	2
Optional	Driver Cable	1.5M	

Accessories



GT-800-PCI-ACC1
& 64pin Flat Cable



Terminal Board



SCSI Cable

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