

# QS TECHNOLOGY



# PRODUCT

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## CATALOGUE

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## Company Profile

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QS Technology Co.,Ltd. We take pride in being the first entity to develop, apply, and commercialize CNC control products in Vietnam. After several years of development, QS Technology branded products continue to gain increasing trust and attention from both domestic and international customers. In addition to these strengths, accumulated experience over many years in the fields of machinery manufacturing, automation systems, and electronic circuit boards further enhances our capabilities. We are confident in mastering technology and being able to satisfy the desires of our customers.



# CNC CONTROLLER

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Modern design, advanced operators interface and powerful performance is what operators can find in QS Technology CNC Controller.



# MILLING CONTROLLER



## 5 Inches Milling Controller

- Model: F54
- 4 axis control



## 7 Inches Milling Controller

- Model: F75T (Touch Screen)
- 5 axis control



## 8 Inches Milling Controller

- Model: F86
- 4-6 axis control



## 8 Inches Milling Controller

- Model: Astro-6AH
- 4-6 axis control



## 10.4 Inches Milling Controller

- Model: F10T (Touch Screen)
- 4-6 axis control

# MILLING CONTROLLER



8 Inches Milling Controller

- Model: F86
- 4-6 axis control



10.4 Inches Milling Controller

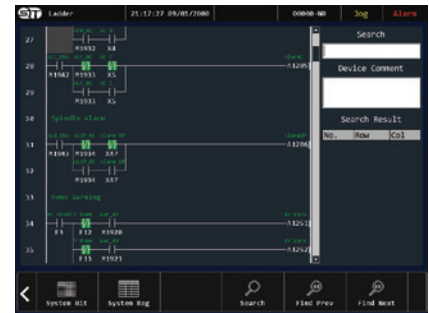
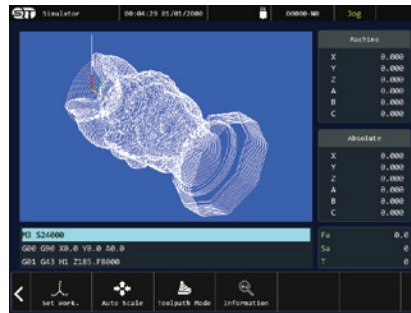
- Model: Astro-10i
- 4-6 axis control

## Common Information

- Monitor size: 5 - 10.4 Inches
- Axis control: 4 - 6 axis control
- Case material: Aluminum
- ATC Macro support
- Operation keys: Membrane keypad / Silicon
- Motion control: Pulse and Direction / CW-CCW / A-B
- Control system: Open loop / Close loop

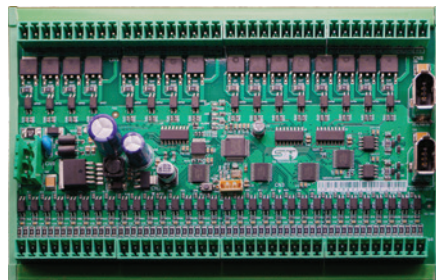
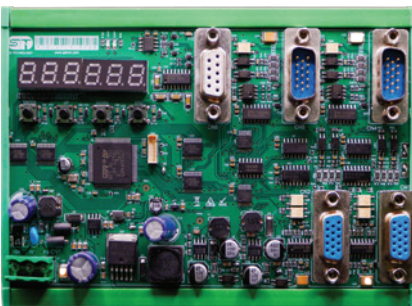
# Operation Interface

Modern, friendly operation interface, intuitive with all information and easy to use is what you can find in QS CNC Controller.



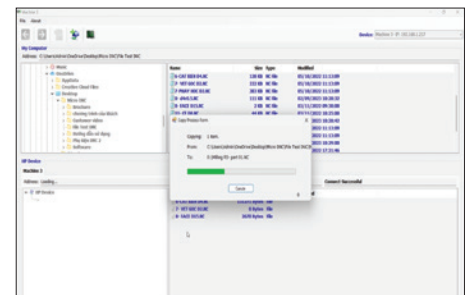
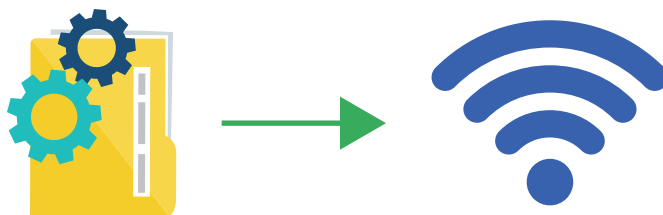
# Expansion device

Expand machine application with QS Technology expansion device such as: I/O Link board, PID, DAC , ...



# Online data management

QS Technology controller is integrated Wi-fi function. Allow the operators able to transmit, manage working data online.



# MOTION CONTROLLER

## Selection table

Specification		Model			
		F54	F75	F75T	F86
General	Dimension	220 x 140 x 30 (mm)	300 x 210 x 40 (mm)	200 x 130 x 40 (mm)	326 x 245 x 30 (mm)
	Materials	Aluminum	Aluminum	Aluminum	Aluminum
	Max. PLC Axis	0	1	1	3
	Axis Control	4	5	5	4 - 6
	Max. Axis (Optional)	4	5	5	6
	Max. Analog Spindle	1	1	1	2
	Max.Spindle Simultaneous Control	4	4	4	6
	Min. Control Unit	0.0001	0.0001	0.0001	0.0001
	Max.Number Of Program Coordinate	18	18	18	18
	Max Number Of Table Tools	40	40	40	40
	Look-Ahead	250	250	250	250
	Block Processing Time	250	250	250	250
Hardware Specification	Standard I/O	16/6	16/12	16/12	24/16
	Optional I/O	256/256	256/256	256/256	256/256
	DA	1	1	1	1
	Monitor	5 Inches	7 Inches	7 Inches	8 Inches
	RS485	1	1	1	1
	USB Port	1	1	1	1
Compensation	Backlash Compensation	✓	✓	✓	✓
	Pitch Error Compensation	✗	✗	✗	✗
Multi axis control mode (Optional)	DWO	✗	✗	✗	(Option)
	TWP	✗	✗	✗	(Option)
	RTCP	✗	✗	✗	(Option)
Operation	MPG Simulation	✓	✓	✓	✓
	Dry Run	✓	✓	✓	✓
	MPG Offsets	✓	✓	✓	✓
	Restart at feedhold	✓	✓	✓	✓
	Start from any block	✓	✓	✓	✓
Tool Management	ATC Automatic Tool Change	✓	✓	✓	✓
	Too-life management	✓	✓	✓	✓
	Tool radius compensation in plane	✓	✓	✓	✓
	look-ahead contour violations detect	✓	✓	✓	✓
	Tool life monitoring	✓	✓	✓	✓
System control	Open loop / Closed loop	Open loop	Open loop	Open loop	Open loop

# MOTION CONTROLLER

## Selection table

Specification		Model		
		F10T	ASTRO-6A	ASTRO-10i
General	Dimension	254 x 210 x 40 (mm)	200 x 130 x 30 (mm)	326 x 245 x 30 (mm)
	Materials	Aluminum	Aluminum	Aluminum
	Max. PLC Axis	3	3	3
	Axis Control	4 - 6	4	4 - 6
	Max. Axis (Optional)	6	4	6
	Max. Analog Spindle	1	1	2
	Max.Spindle Simultaneous Axis Control	6	6	6
	Min. Control Unit	0.0001	0.0001	0.0001
	Max.Number Of Program Coordinate	18	18	18
	Max Number Of Table Tools	40	40	40
	Look-Ahead	250	500	1000
	Block Processing Time	250	500	1000
Hardware Specification	Standard I/O	24/16	24/16	24/16
	Optional I/O	256/256	256/256	256/256
	DA	1	2	2
	Monitor	10.4 Inches	8 Inches	10.4 Inches
	RS485	1	1	1
USB Port	1	1	1	
Compensation	Backlash Compensation			
	Pitch Error Compensation			
Multi axis control mode (Optional)	DWO	(Option)	(Option)	(Option)
	TWP	(Option)	(Option)	(Option)
	RTCP	(Option)	(Option)	(Option)
Operation	MPG Simulation			
	Dry Run			
	MPG Offsets			
	Restart at feedhold			
	Start from any block			
Tool Management	ATC Automatic Tool Change			
	Too-life management			
	Tool radius compensation in plane			
	look-ahead contour violations detect			
	Tool life monitoring			
System control	Open loop / Closed loop	Open loop	Closed loop	Closed loop

QS TECHNOLOGY





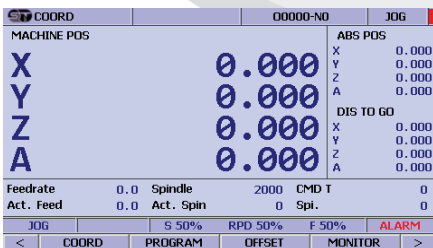
# F54

## 5 Inches Milling Controller

- 4 axis control
- Open loop (Index Z) control system
- PLC ladder Integrated
- Input/Output: 16/6
- Automatic tool change (ATC)

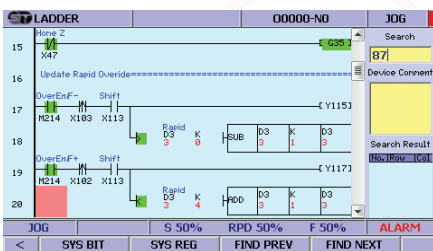
## Introduction

F54 controller with compact designed, powerful performance and many useful functions such as toolpath simulation, quickly get center point. Beside that PLC ladder is integrated on this controller.



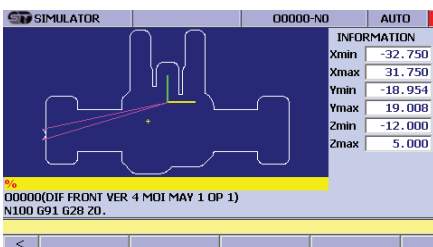
### Axis functions

- Feedrate override: 0 - 150%
- Pulse command speed. Max: 500 KHz
- Feedrate interpolation: Yes
- MPG Feed: Yes
- Contour handwheel: Yes
- Rotary axis, turning endlessly: Yes



### Spindle functions

- Spindle override: 0 - 120%
- Gear stage: 4
- Spindle speed limitation min/max: 0 - 999999
- Spindle speed, analog, pulse: Yes



### Interpolation

- Linear interpolation axis.max: 4
- Circle via center point and end point: Yes
- Helical interpolation: Yes
- Continuous path mode: Yes
- Advance surface look-ahead velocity control: Yes
- CNC block compensation: Yes



# F75T

## 7 Inches Milling Controller (Touch)

- 5 axis control
- Open loop (Index Z) control system
- PLC ladder Integrated
- Input/Output: 16/6
- Automatic tool change (ATC)

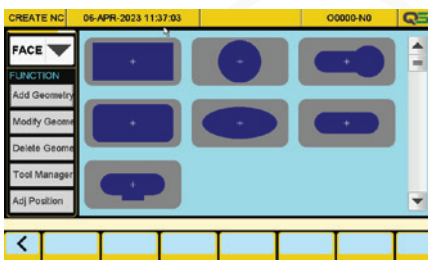
## Introduction

F75T controller with compact touch screen designed, powerful performance and many useful functions such as toolpath simulation, quickly get center point, PLC ladder integrated. This controller allow to select and create working program from available libraries.



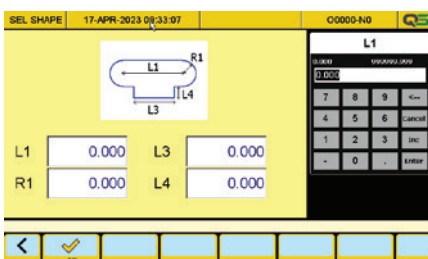
### Axis functions

- Feedrate override: 0 - 150%
- Pulse command speed. Max: 200KHz
- Feedrate interpolation: Yes
- MPG Feed: Yes
- Contour handwheel: Yes
- Rotary axis, turning endlessly: Yes



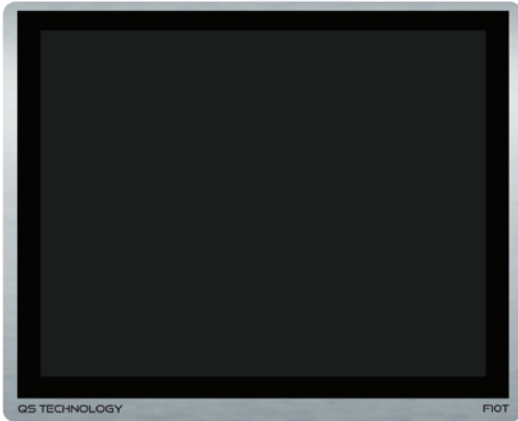
### Spindle functions

- Spindle override: 0 - 120%
- Gear stage: 4
- Spindle speed limitation min/max: 0 - 999999
- Spindle speed, analog, pulse: Yes



### Interpolation

- Linear interpolation axis.max: 4
- Circle via center point and end point: Yes
- Helical interpolation: Yes
- Continuous path mode: Yes
- Advance surface look-ahead velocity control: Yes
- CNC block compensation: Yes



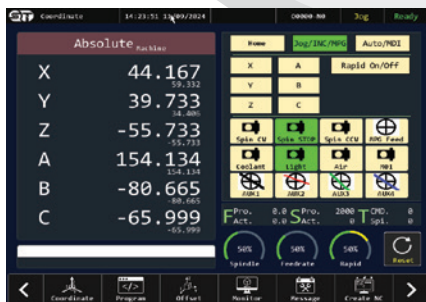
# F10T

## 10.4 Inches Milling Controller (Touch)

- 4-6 axis control
- Open loop (Index Z) control system
- PLC ladder Integrated
- Input/Output: 24/16
- Automatic tool change (ATC)

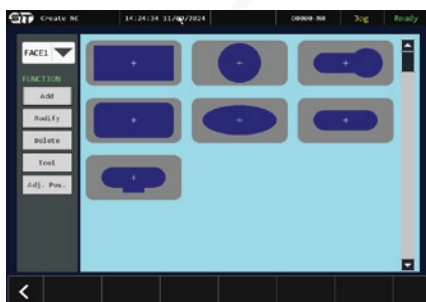
## Introduction

F10T is a touch controller, wide touch screen, contained many useful functions such as toolpath simulation, quickly get center point, PLC ladder integrated. This controller allow to select and create working program from available libraries.



### Axis functions

- Feedrate override: 0 - 150%
- Pulse command speed. Max: 500 KHz
- Feedrate interpolation: Yes
- MPG Feed: Yes
- Contour handwheel: Yes
- Rotary axis, turning endlessly: Yes



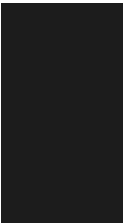
### Spindle functions

- Spindle override: 0 - 120%
- Gear stage: 4
- Spindle speed limitation min/max: 0 - 999999
- Spindle speed, analog, pulse: Yes
- Spindle control via PLC: Yes



### Interpolation

- Linear interpolation axis.max: 6
- Circle via center point and end point: Yes
- Helical interpolation: Yes
- Continuous path mode: Yes
- Advance surface look-ahead velocity control: Yes
- CNC block compensation: Yes



# F86

## 8 Inches Milling Controller

- 4 - 6 axis control
- Open loop (Index Z) control system
- PLC ladder Integrated
- Input/Output: 24/16
- Automatic tool change (ATC)

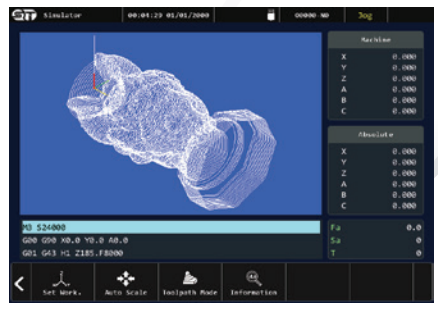
## Introduction

F86 controller with modern designed, powerful performance and many useful functions such as toolpath simulation, quickly get center point, PLC ladder integrated.



## Axis functions

- Feedrate override: 0 - 150%
- Pulse command speed. Max: 500 KHz
- Feedrate interpolation: Yes
- MPG Feed: Yes
- Contour handwheel: Yes
- Rotary axis, turning endlessly: Yes



## Spindle functions

- Spindle override: 0 - 120%
- Gear stage: 4
- Spindle speed limitation min/max: 0 - 999999
- Spindle speed, analog, pulse: Yes
- Spindle control via PLC: Yes



## Interpolation

- Linear interpolation axis.max: 6
- Circle via center point and end point: Yes
- Helical interpolation: Yes
- Continuous path mode: Yes
- Advance surface look-ahead velocity control: Yes
- CNC block compensation: Yes

# ASTRO-6AH

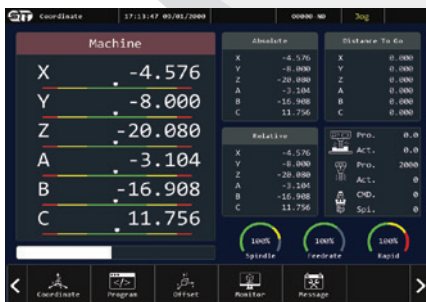
## 8 Inches Milling Controller

- 4 - 6 axis control
- Closed loop
- PLC ladder Integrated
- Input/Output: 24/16
- Automatic tool change (ATC)
- Backlash, Pitch Error compensation



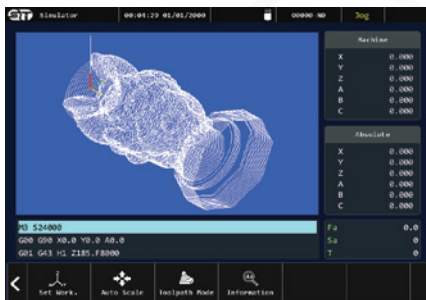
## Introduction

The Astro-6AH is a control unit with a closed-loop control system that enhances the precision of machine operations during the processing. Additionally, the function keys on the control panel are expanded, allowing the operator to perform tasks more easily.



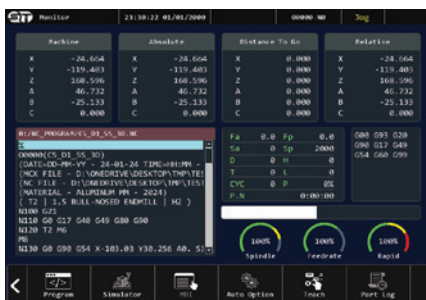
## Axis functions

- Feedrate override: 0 - 150%
- Pulse command speed. Max: 500 KHz
- Feedrate interpolation: Yes
- MPG Feed: Yes
- Contour handwheel: Yes
- Rotary axis, turning endlessly: Yes
- Acceleration with jerk limitation: Yes



## Spindle functions

- Spindle override: 0 - 120%
- Gear stage: 4
- Spindle speed limitation min/max: 0 - 999999
- Spindle speed, analog, pulse: Yes
- Spindle control via PLC: Yes
- Axis synchronization on the fly: Yes



## Interpolation

- Linear interpolation axis.max: 6
- Circle via center point and end point: Yes
- Helical interpolation: Yes
- Continuous path mode: Yes
- Advance surface look-ahead velocity control: Yes
- CNC block compensation: Yes



# ASTRO-6AV

## 8 Inches Milling Controller

- 4 - 6 axis control
- Closed loop
- PLC ladder Integrated
- Input/Output: 24/16
- Automatic tool change (ATC)
- Backlash, Pitch Error compensation

## Introduction

The Astro-6AV is the vertical version of the Astro-6AH model. In this version, there are more function keys on the control panel, along with an MPG handwheel, compared to the Astro-6AH version.

### Axis functions

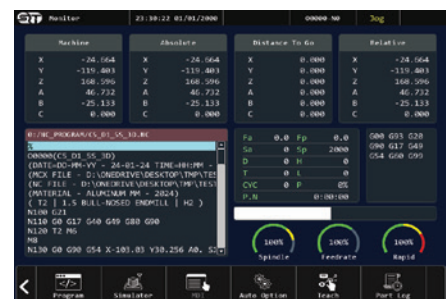
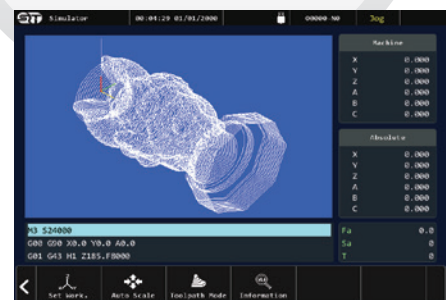
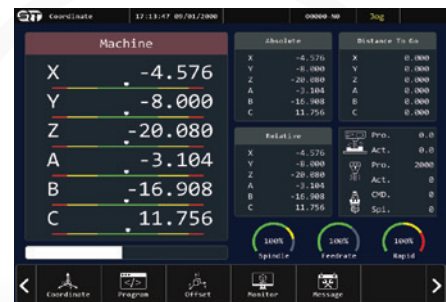
- Feedrate override: 0 - 150%
- Pulse command speed. Max: 500 KHz
- Feedrate interpolation: Yes
- MPG Feed: Yes
- Contour handwheel: Yes
- Rotary axis, turning endlessly: Yes
- Acceleration with jerk limitation: Yes

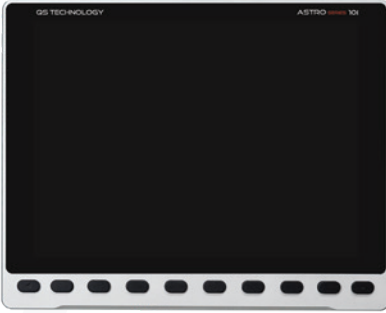
### Spindle functions

- Spindle override: 0 - 120%
- Gear stage: 4
- Spindle speed limitation min/max: 0 - 999999
- Spindle speed, analog, pulse: Yes
- Spindle control via PLC: Yes
- Axis synchronization on the fly: Yes

### Interpolation

- Linear interpolation axis.max: 6
- Circle via center point and end point: Yes
- Helical interpolation: Yes
- Continuous path mode: Yes
- Advance surface look-ahead velocity control: Yes
- CNC block compensation: Yes





# ASTRO-10i

## 10.4 Inches Milling Controller

- 4 - 6 axis control
- Closed loop
- PLC ladder Integrated
- Input/Output: 24/16
- Automatic tool change (ATC)
- Backlash, Pitch Error compensation

## Introduction

The Astro-10i control unit is a high-end version with a modern design, featuring a large display and an expanded range of function keys compared to other versions.

### Axis functions

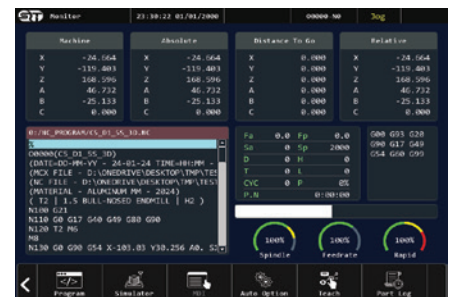
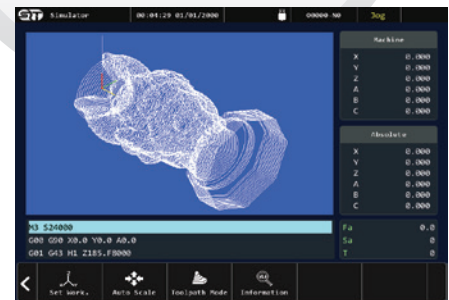
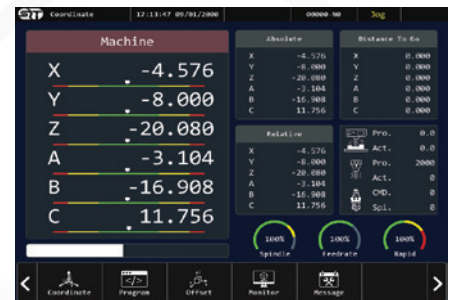
- Feedrate override: 0 - 150%
- Pulse command speed. Max: 1000 KHz
- Feedrate interpolation: Yes
- MPG Feed: Yes
- Contour handwheel: Yes
- Rotary axis, turning endlessly: Yes
- Acceleration with jerk limitation: Yes

### Spindle functions

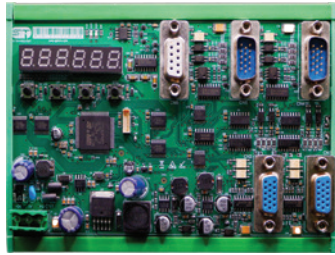
- Spindle override: 0 - 120%
- Gear stage: 4
- Spindle speed limitation min/max: 0 - 999999
- Spindle speed, analog, pulse: Yes
- Spindle control via PLC: Yes
- Axis synchronization on the fly: Yes

### Interpolation

- Linear interpolation axis.max: 6
- Circle via center point and end point: Yes
- Helical interpolation: Yes
- Continuous path mode: Yes
- Advance surface look-ahead velocity control: Yes
- CNC block compensation: Yes



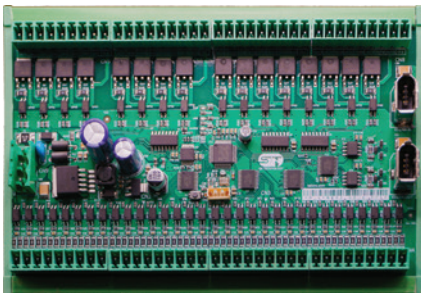
# OPTIONAL DEVICE



## Board PID V1\_10722

Convert the digital signal of controller to analog signal for control old servo driver.

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## Board I/O Link\_32\_V1\_1\_0722

Expand Input / Output port for controller  
32 Input / 32 Output port.

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## Board DAC 12FCV1\_1222

Convert the servo driver from velocity control (analog) to position control (pulsed).

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## Board I/O Link\_RLTR\_07\_V10723

Expand the controller with an additional  
8 input ports and 8 output ports.

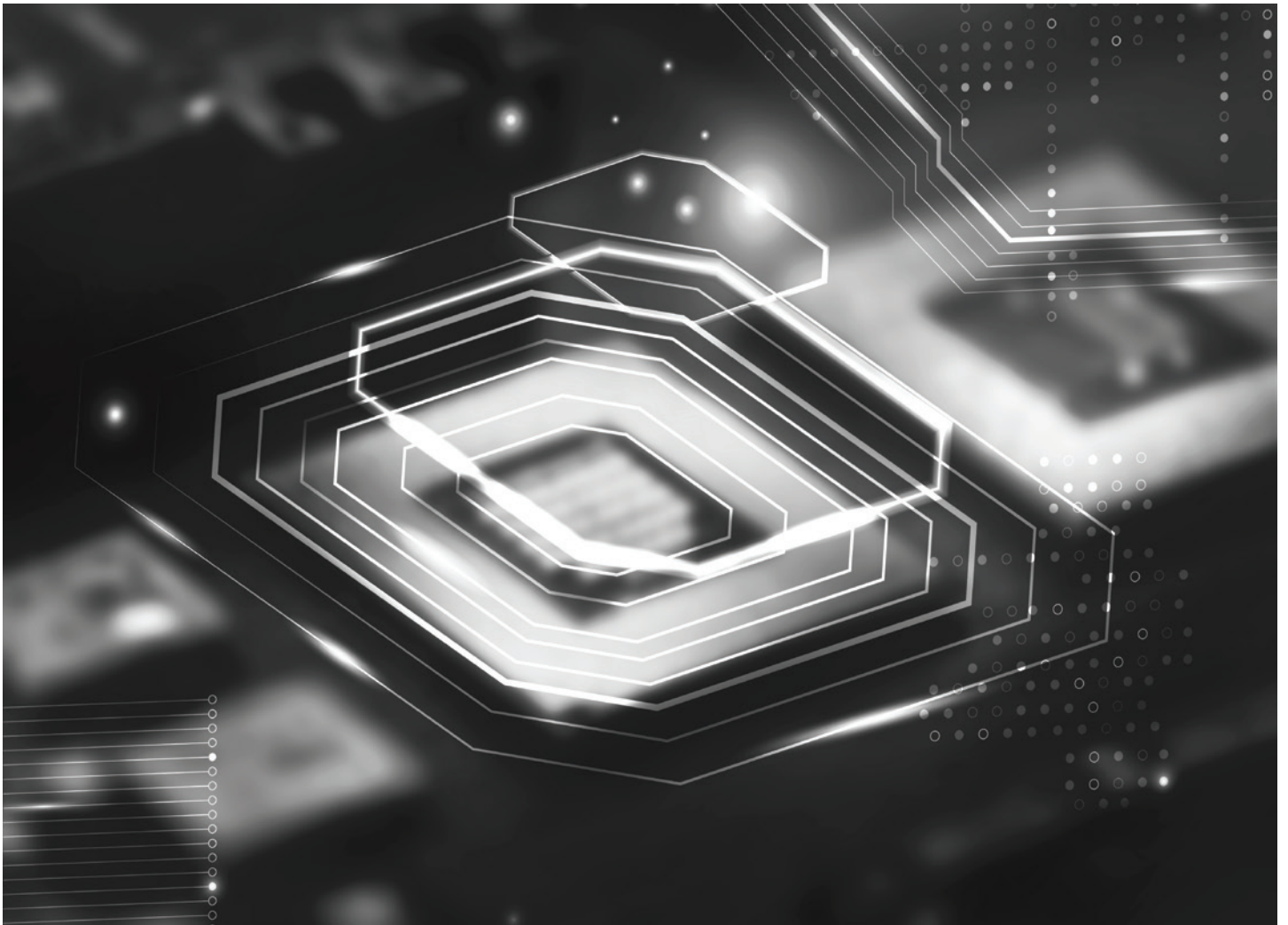
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# DNC DEVICE

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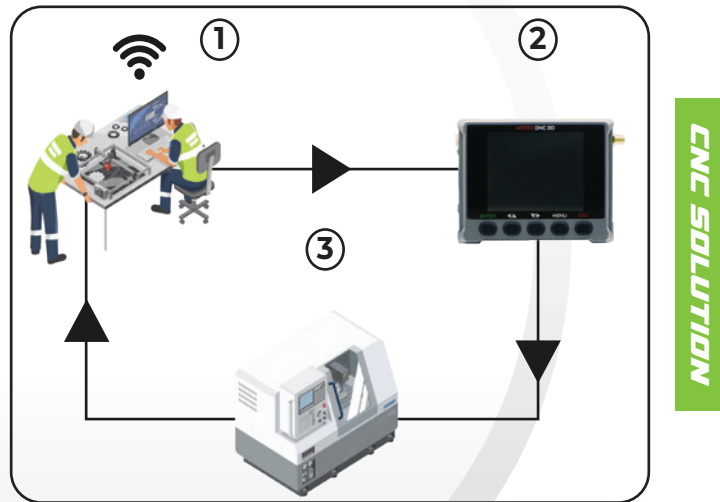
The DNC device assists in transmitting machining programs and data to CNC machines via an RS232 communication port. This device can replace traditional data transmission methods using computers. This product has been introduced in over 30 countries worldwide, including India, Thailand, Turkey, Indonesia, Malaysia, ...



# DNC DEVICE

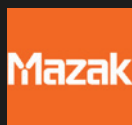
## Overview

DNC device is an important device in data transmit to CNC machine. It can help reduce the data uploading time to machine and the user also can monitor the working process of machine via Wi-Fi function. QS Technology DNC device is compatible with many brands: Fanuc, Okuma, HAAS, Mazak, ...



With compact design, DNC device doesn't take too much space. Furthermore DNC device also has many useful features that will help the operators save time such as: Data transmit through Wi-Fi, checking the shape of working program, toolpath, the operators also can edit program directly on DNC device without using a computer. QS Technology Micro DNC device has been widely used in many industry domains such as: Mold making, Wire CNC cutting, Machining (Milling / Turning), ...

## COMPATIBLE





# MICRO DNC 2D

- Dimension: 110 x 75 x 30mm
- LCD size: 3.2 Inches (Color)
- USB port: 2 port
- Voltage input: 12VDC-1A
- Memory: 4 Gb
- Case materials: Aluminum anodizing

## Introduction

It is a device for transferring data from a USB to a CNC machine via an RS232 communication port. The device also supports users in loading and retrieving programs from the CNC machine.

### DNC Transfer

This feature enables operators able to transfer the working program to CNC machine with 3 steps:

1. Setting up the speed (Baudrate)
2. Select working program
3. Start machining process

### Read from CNC

Allow operators able to get the program/data from CNC machine and save it on DNC device memories.

### Edit

Operators able to edit working program directly on DNC device without using computer.

### Toolpath simulation

Simulate the shape of the machining program and the tool path

### Online data management

Transmit and receive programs via Wi-Fi and support monitoring of data and machine operation.



# MICRO DNC 3A



- Dimension: 110 x 75 x 30mm
- LCD: 2.7 Inches (Mono)
- USB port: 2 port
- Voltage input: 12VDC-1A
- Memory: 4 Gb
- Case material: ABS plastic

## Introduction

It is a device for transferring data from a USB to a CNC machine via an RS232 communication port. The device also supports users in loading and retrieving programs from the CNC machine.

### DNC Transfer

This feature enables operators able to transfer the working program to CNC machine with 3 steps:

1. Setting up the speed (Baudrate)
2. Select working program
3. Start machining process

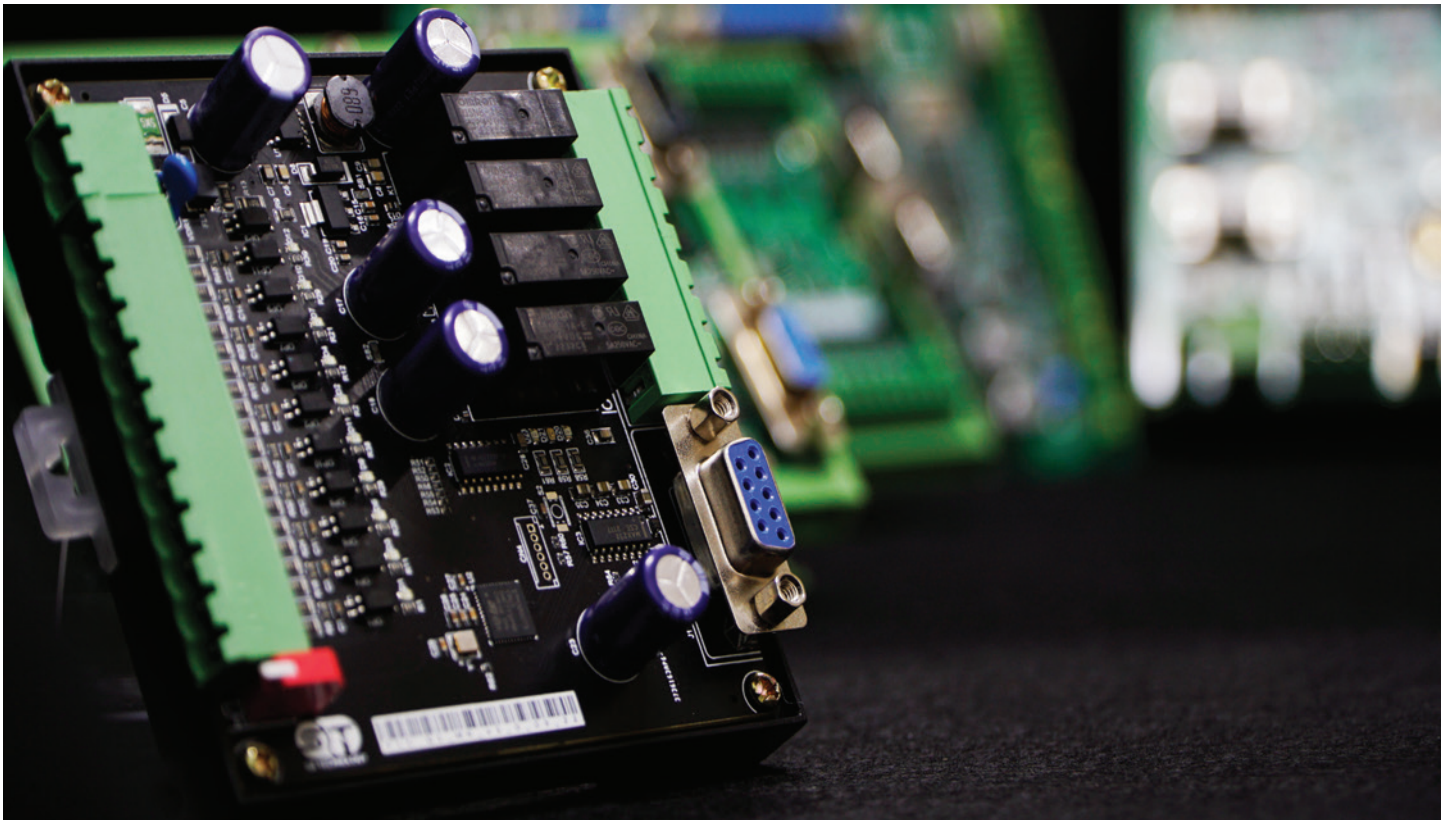
### Read from CNC

Allow operators able to get the program/data from CNC machine and save it on DNC device memories.

### Online data management

Transmit and receive programs via Wi-Fi and support monitoring of data and machine operation.





## CONTACT INFORMATION



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