# **Circuit board function introduction**

# <u>BKL:</u>



## A board:



Y axis original point sensor

Electromagnetic valve for press material

Barrier alarm

### B board:



Control height motor and rotate motor in the cutting head

Control EOT, DRT/PRT, red light, pen

Control punch head

## C board:



Control 350W router

X axis original point sensor

**Control POT** 

# **EPOS board:**



X,Y,U1,Z1,U2,Z2,U3,Z3 motor

Router function

C board commutation

## Power board:



#### Pump

Reversing valve function

The signal of the origin sensor in X/Y direction

The signal of the ZHome A/B (Cutting head rotate reset)

**AKI** function

# DSP board:



Cutting head reset (Reset sequence: head  $2 \rightarrow$  head $3 \rightarrow$  head1)

Cut in the right procedure

Pause

Back to original point

Pump

Automatic feeding

Electromagnetic valve

**AKI** function

Cutting tool

Pen

Vacuum

#### 485/GPRS communication board:







New

Communication between PC and machine

# <u>BK3:</u>



# A board:



X, Y axis original sensor

Electromagnetic valve for press material

Barrier alarm

## B board:



Control height motor and rotate motor in the cutting head

Control EOT, DRT/PRT, red light, pen

Control punch head

The signal of the ZHome A/B (Cutting head rotate reset)

The signal of select cutting head

Punch head

Control EOT and DRT/PRT

## C board:



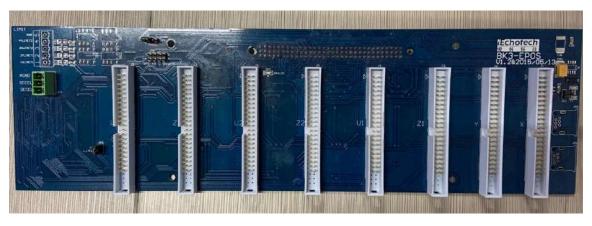
Control 350W router

**Control POT** 

SPI communication

485 communication

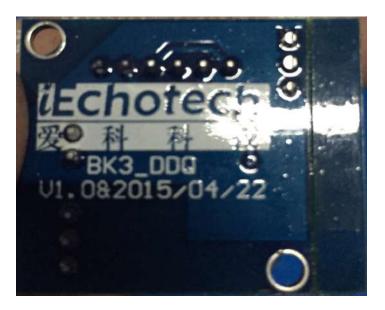
## **EPOS board:**



X, Y, U1, Z1, U2, Z2, U3, Z3 motor

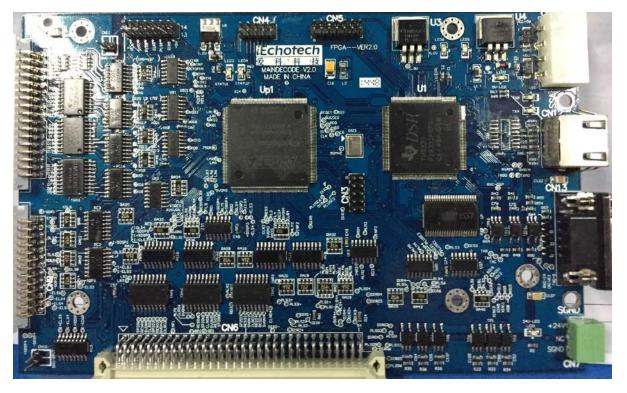
Signal of cutting head select

## AKI board:



**AKI** function

## DSP board:



Cutting head reset (Reset sequence: head  $2 \rightarrow$  head $3 \rightarrow$  head1)

Cut in the right procedure

Pause

Back to original point

Pump

Automatic feeding

Electromagnetic valve

**AKI** function

Cutting tool

Pen

Vacuum

#### **Power board:**



Pump

Reversing valve function

X, Y axis original sensor

The signal of the ZHome A/B

**AKI** function

Pause

Emergency stop

24V time-delay relay

The signal of Zhome A/B original point

DC power input

# QF board:



Control electromagnetic valve for Vacuum area select

# FZ1 board:



Vacuum area selects

Vacuum power

# 485/GPRS communication board:



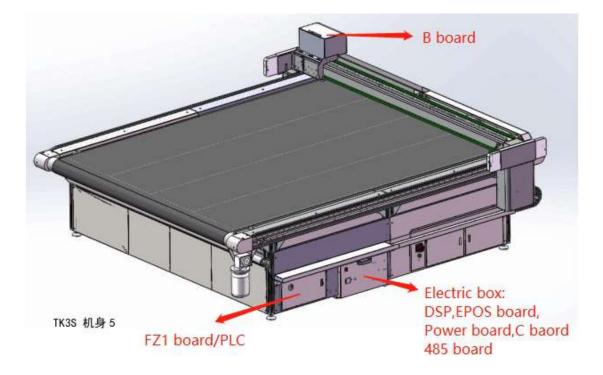




New

Communication between PC and machine





### B board:



Control height motor and rotate motor in the cutting head

Control EOT, DRT/PRT, red light, pen

Control punch head

The signal of the ZHome A/B

The signal of select cutting head

Punch head

Control EOT and DRT/PRT

### C board:



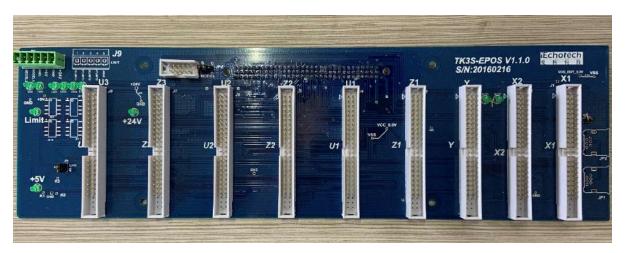
Control router

**Control POT** 

SPI communication

485 communication

### **EPOS board:**



X1,X2,Y,U1,Z1,U2,Z2,U3,Z3 motor

Signal of cutting head select

#### Power board:



Pump

Reversing valve function

The signal of the origin sensor in X/Y direction

The signal of the ZHome A/B

**AKI** function

Pause

Emergency stop

24V time-delay relay

The signal of X1,X2,Y ,Zhome A/B original point

DC power input

### DSP board:



Cutting head reset (Reset sequence: head  $2 \rightarrow$  head $3 \rightarrow$  head1)

Cut in the right procedure

Pause

Back to original point

Pump

Automatic feeding

## Electromagnetic valve

**AKI** function

Cutting tool

Pen

Vacuum

## QF board:



Control electromagnetic valve for Vacuum area select

## FZ1 board:



Vacuum area select

Vacuum power

## 485/GPRS communication board:







New

Communication between PC and machine