

KBS-01

User's Manual

Bear Technologies
www.beartech.com.tw

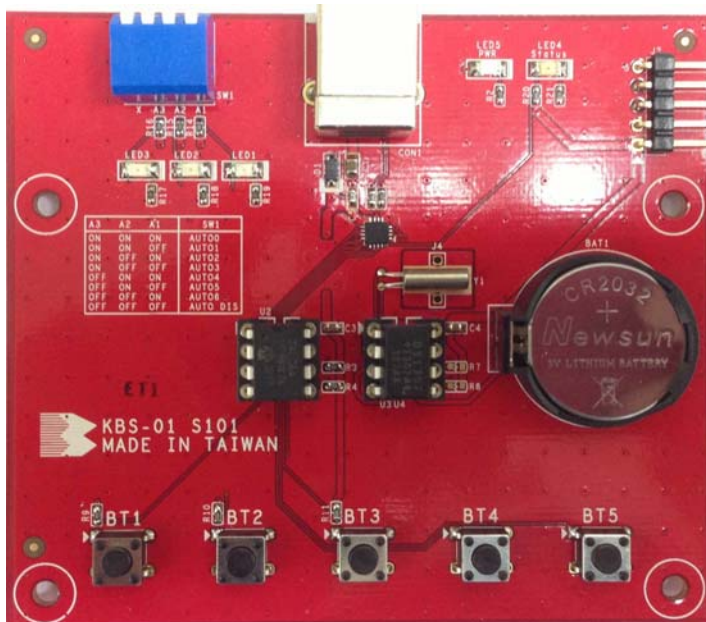
Section 1 : Introduction

1. Product Feature

- A) USB Keyboard
Up to 5 Buttons
- B) Auto Key In Keyboard
Up to 28 keys
- C) Auto Key In RTC Time

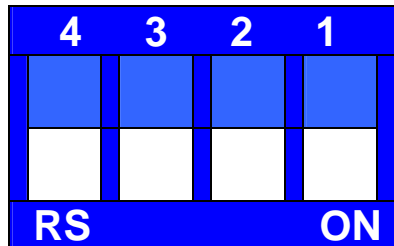
2. Accessories

- A) KBS-01 S101 *1
- B) USB Cable *1



3. JUMPER SETTING & LED

1> SW1



Bit 1 : A1 (ON → A1 = 0 , OFF → A1 = 1)

Bit 2 : A2 (ON → A2 = 0 , OFF → A2 = 1)

Bit 3 : A3 (ON → A3 = 0 , OFF → A3 = 1)

Bit 4 : Reserve

SW1	A3	A2	A1
Auto 0	0	0	0
Auto 1	0	0	1
Auto 2	0	1	0
Auto 3	0	1	1
Auto 4	1	0	0
Auto 5	1	0	1
Auto 6	1	1	0
Auto disable	1	1	1

- 2> J2 : Flash Pin
- 3> LED1 : SW1 A1 Status
- LED2 : SW1 A2 Status
- LED3 : SW1 A3 Status
- LED4 : Keyboard Status
- LED5 : Power LED
- 4> BT1 : Button 1
- BT2 : Button 2
- BT3 : Button 3
- BT4 : Button 4
- BT5 : Button 5

Section 2 : Common Program Syntax

2-1> Filename: KBS-01.EXE

KBS-01 Utility Ver 1.0 06/19/2014 Bear Technologies

```

0001 00 01 02 03-04 05 06 07-08 09 0A 0B-0C 0D 0E 0F
BUT1: 000 01 00 28 00-00 00 00 00-00 00 00 00-00 00 00 00 ..{.....
010 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
BUT2: 020 01 00 29 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
030 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
BUT3: 040 01 00 14 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
050 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
BUT4: 060 01 00 1C 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
BUT5: 070 01 00 11 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
AUTO0: 080 01 00 4C 00-01 00 66 00-14 00 43 00-0A 00 28 00 ..L...f...C...(.
090 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
A3:ON 0A0 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
A2:ON 0B0 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
A1:ON 0C0 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
0D0 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
0E0 00 00 00 00-00 00 00 00-00 00 00 00-00 00 00 00 ..}.....
RTC0: 0F0 28 00 28 00-51 00 28 00-28 00 28 00-00 00 00 00 ..(.Q.(.(.....
  
```

```

BUT1: 0.1s ENTER
BUT2: 0.1s ESCAPE
BUT3: 0.1s q
BUT4: 0.1s y
BUT5: 0.1s n
  
```

```

AUTO0: 0.1s Delete 0.1s RTC_SetUp 2s F10 1s ENTER
RTC0: MM ENTER DD ENTER CCYY Down hh ENTER mm ENTER ss ENTER

AUTO1: 0.1s Delete 0.1s RTC_SetUp 2s F10 1s ENTER
RTC1: MM ENTER DD ENTER CCYY Down hh ENTER mm ENTER ss ENTER

AUTO2: 0.1s Delete 0.1s RTC_SetUp 2s F10 1s ENTER
RTC2: MM ENTER DD ENTER CCYY Down hh ENTER mm ENTER ss ENTER

AUTO3: 0.1s Delete 0.1s RTC_SetUp 2s F10 1s ENTER
RTC3: MM ENTER DD ENTER CCYY Down hh ENTER mm ENTER ss ENTER

AUTO4: 0.1s Delete 0.1s RTC_SetUp 2s F10 1s ENTER
RTC4: MM ENTER DD ENTER CCYY Down hh ENTER mm ENTER ss ENTER
  
```

Mode	A3	A2	A1
AUTO0	ON	ON	ON
AUTO1	ON	ON	OFF
AUTO2	ON	OFF	ON
AUTO3	ON	OFF	OFF
AUTO4	OFF	ON	ON
AUTO5	OFF	ON	OFF
AUTO6	OFF	OFF	ON
Disable	OFF	OFF	OFF

2-2> Usage

Help

Help Message

```
Help Message

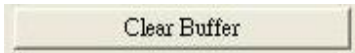
BUT1:I2C[00:1F](Key1..8)  BUT2:I2C[20:3F](Key1..8)  BUT3:I2C[40:5F] (Key1..8)
BUT4:I2C[60:6F](Key1..4)  BUT5:I2C[70:7F](Key1..4)
AUTO0:I2C[080:0EF](Key1..28)  RTC0:I2C[0F0:0FF] (RTC_SetUp's Following Keys)
AUTO1:I2C[100:16F](Key1..28)  RTC1:I2C[170:17F] (RTC_SetUp's Following Keys)
AUTO2:I2C[180:1EF](Key1..28)  RTC2:I2C[1F0:1FF] (RTC_SetUp's Following Keys)
AUTO3:I2C[200:26F](Key1..28)  RTC3:I2C[270:27F] (RTC_SetUp's Following Keys)
AUTO4:I2C[280:2EF](Key1..28)  RTC4:I2C[2F0:2FF] (RTC_SetUp's Following Keys)
AUTO5:I2C[300:36F](Key1..28)  RTC5:I2C[370:37F] (RTC_SetUp's Following Keys)
AUTO6:I2C[380:3EF](Key1..28)  RTC6:I2C[3F0:3FF] (RTC_SetUp's Following Keys)

I2C[00:03] : BUT1_Key1  I2C[04:07] : BUT1_Key2  I2C[1C:1F] : BUT1_Key8
I2C[40:43] : BUT3_Key1  I2C[44:47] : BUT3_Key2  I2C[5C:5F] : BUT3_Key8
I2C[80:83] : AUTO0_Key1 I2C[84:87] : AUTO0_Key2 I2C[88:8B] : AUTO0_Key3

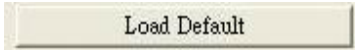
Key?[0] = 1          .... Waiting 0.1 second
Key?[0] = 26         .... Waiting 2.6 second
Key?[1].Bit2 =(Alt+)
Key?[1].Bit1 =(Shift+)
Key?[1].Bit0 =(Ctrl+)
Key?[2] : KeyBoard_UsageID (0x4C:Delete 0x28:ENTER 0x04:a 0x66:RTC_SetUp)
Key?[3] : Reserved

I2C[00:03] = { 1,0x01,0x06,0x00}  0.1s Ctrl+c
I2C[80:83] = {12,0x00,0x4C,0x00}  1.2s Delete

UsageID:UsageName  UsageID:UsageName  UsageID:UsageName  UsageID:UsageName
0x04:a             0x05:b             0x06:c             0x07:d
0x08:e             0x09:f             0x0A:g             0x0B:h
0x0C:i             0x0D:j             0x0E:k             0x0F:l
0x10:m             0x11:n             0x12:o             0x13:p
0x14:q             0x15:r             0x16:s             0x17:t
0x18:u             0x19:v             0x1A:w             0x1B:x
0x1C:y             0x1D:z             0x1E:l             0x1F:2
0x20:3             0x21:4             0x22:5             0x23:6
0x24:7             0x25:8             0x26:9             0x27:0
0x28:ENTER         0x29:ESCAPE        0x2A:Backspace    0x2B:Tab
0x2C:Spacebar      0x39:CapsLock      0x3A:F1            0x3B:F2
0x3C:F3            0x3D:F4            0x3E:F5            0x3F:F6
0x40:F7            0x41:F8            0x42:F9            0x43:F10
0x44:F11           0x45:F12           0x46:PrintScreen  0x47:ScrollLock
0x48:Pause         0x49:Insert        0x4A:Home          0x4B:PageUp
0x4C:Delete        0x4D:End           0x4E:PageDown     0x4F:Right
0x50:Left          0x51:Down          0x52:Up            0x53:NumLock
0x66:RTC_SetUp
```



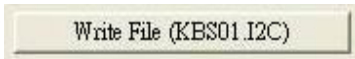
Clear Edit Buffer



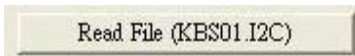
Load Edit Buffer Default



Describe the details of Edit buffer



The buffer is written to the file (KBS01.I2C)



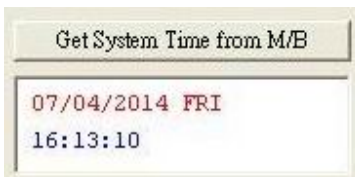
Read file (KBS01.I2C) to Edit Buffer



The buffer is written to KBS-01



Set system time to KBS-01



Get system time from M/B

Get I2C(00:FF) from KBS-01

Get edit buffer Data from KBS-01

Get RTC Time from KBS-01

```
07/04/2014 FRI
16:13:10
```

Get RTC time from KBS-01

Get Auto Mode

Mode	A3	A2	A1
AUTO0	ON	ON	ON
AUTO1	ON	ON	OFF
AUTO2	ON	OFF	ON
AUTO3	ON	OFF	OFF
AUTO4	OFF	ON	ON
AUTO5	OFF	ON	OFF
AUTO6	OFF	OFF	ON
Disable	OFF	OFF	OFF

Get auto mode

Section 3 : Testing Principle

A. Compatibility:

Mother board , IPC , Server ,NB.

B. Efficiency and Completeness :

Automatic Key in character, RTC Time, **avoid unnecessary human error**.
With KBS-01.EXE can modify Button, key in, RTC Time .

C. Operating Procedure:

1. Connect KBS-01 to System
2. When the system detects KBS-01, can use it same as a keyboard, can automatic key in the desired character
3. Execute **KBS-01.EXE** ,can modify the desired character.

**Program updates and product related information
can be viewed and downloaded at :**

<http://www.beartech.com.tw>

Bear Technologies

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