

保密等级：公开



HBC1102 Data controller

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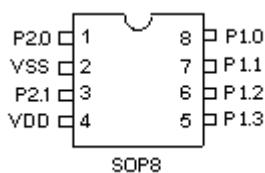
1、General Descriptions

The HBC1102 IC is a high-performance micro-controller ,The device is optimized for use in many industrial and commercial applications. etc.

2、Features

- MCU Operating voltage: 1.8V to 3.6V
- Provided 6 input /output pins: each I/O has bit programmable as input or output port ,
 - (a) They are provided with high sink current 20mA @VDD=3V, VOL=0.5V.
 - (b) They are provided with drive current 7mA @VDD=3V, VOH=2.5V.
 - (c) Pull up 150k ohm resistor @VDD=3V.
- SOP8 package

3、Package SOP8



4、Pads Information

PAD Name	Type	Description
VDD	P	Power input pin.
VSS	P	Ground input pin.
P1.0~P1.3	I/O	P1.0~P1.3 are programmable bi-direction pin. Pull up resistor 150k ohm. Edge (rising or falling) trigger function as input mode.
P2.0~P2.1	I/O	P2.0~P2.1 are programmable bi-direction pin. Pull up resistor 150k ohm.

5、Electrical Characteristics

5.1. Absolute Maximum Ratings

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYSMBOL	RATING	UNIT
DC Supply Voltage	V+	< 7.0	V
Input Voltage Range	V _{IN}	-0.5 to VDD+0.5	V
Operating Temperature	T _A	-40 to 85	°C



Storage Temperature	T_{STO}	-50 to 150	°C
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5.2.DC/AC Characteristics

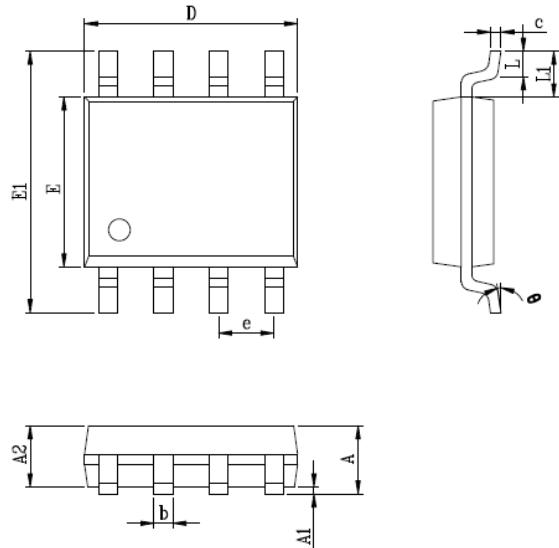
DC CHARACTERISTICS (TA = 25°C, VDD = 3V)

PARAMETER	SYMBOL	TEST CONDITIONS	LIMIT			UNIT
			Min	Typ	Max	
Operating voltage	V_{DD}	-	1.8	-	3.6	V
Operating Current	I	3V	-	2.2	-	mA
Standby Current	I		-	0.1	3	uA
Input High Level	V_{IH}	All I/O port	0.8^*V_{DD}	-	-	V
Input Low Level	V_{IL}	All I/O port	-	-	0.2^*V_{DD}	V
Output Drive	I_{OH}	$VDD=3V, V_{OH}=2.5V$	-	-7	-	mA
Output Sink	I_{OL1}	$VDD=3V, V_{OL}=0.5V$	-	20	-	mA
Input Resistor	R_{up}	Pull up 150K ohm	-	150	-	K ohm
LVR	V_{LVR}			1.5		V

AC CHARACTERISTICS (TA = 25°C, VDD = 3V)

PARAMETER	SYMBOL	TEST CONDITIONS	LIMIT			UNIT
			Min	Typ	Max	
MCU Operation frequency	F_{MCU}	$VDD=1.8V\sim3.6V$		4MHz		MHz
MCU Operation voltage	V_{MCU}		1.8	3.0	3.6	V
Delay after main clock ready	CK		-	500us		us
Delay after wake up	CK			300us		us

6、Packaging Information



Symbol	Dimensions In Millimeters	
	Min	Max
A	1.35	1.75
A1	0.10	0.23
A2	1.30	1.50
b	0.39	0.48
c	0.21	0.26
D	4.70	5.10
E	3.70	4.10
E1	5.80	6.20
e	1.27 (BSC)	
L	0.50	0.80
L1	1.05 (BSC)	
θ	0°	8°

SOP8