

用于开漏和推挽应用的4路双向电平转换器

4-Bit Bidirectional Voltage-Level Translator for Open-Drain and Push-Pull Applications

■ FEATURES

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| <ul style="list-style-type: none"> · Bidirectional translator, No Direction-Control Signal Needed · Data Rates
24Mbps (Push-Pull); 2Mbps (Open-Drain) · 1.65V ~ 5.5V on A Port, 2.3V to 5.5V on B Port ($V_{CCA} \leq V_{CCB}$) · VCC Isolation: Either V_{CCA} or V_{CCB} is at GND, all ports will be in Hi-Z State · No Power-Supply Sequencing Required: Either V_{CCA} or V_{CCB} can be Ramped First | <ul style="list-style-type: none"> · 双向电平转换, 无需方向控制信号 · 最大数据速率
推拉24Mbps, 开漏2Mbps · A端口: 1.65V~5.5V电压, B端口: 2.3V~5.5V电压 ($V_{CCA} \leq V_{CCB}$) · VCC隔离: 任一电源拉到地, 则端口呈现高阻态 · 无电源时序要求: V_{CCA} 或 V_{CCB} 均可优先斜升 |
|--|--|

■ APPLICATIONS

- | | | | |
|--------------------|--------|---------|--------------------|
| · I ² C | · UART | · JTAG | · I ² C |
| · GPIO | · SPI | · SMBus | · MDIO |

■ DESCRIPTION

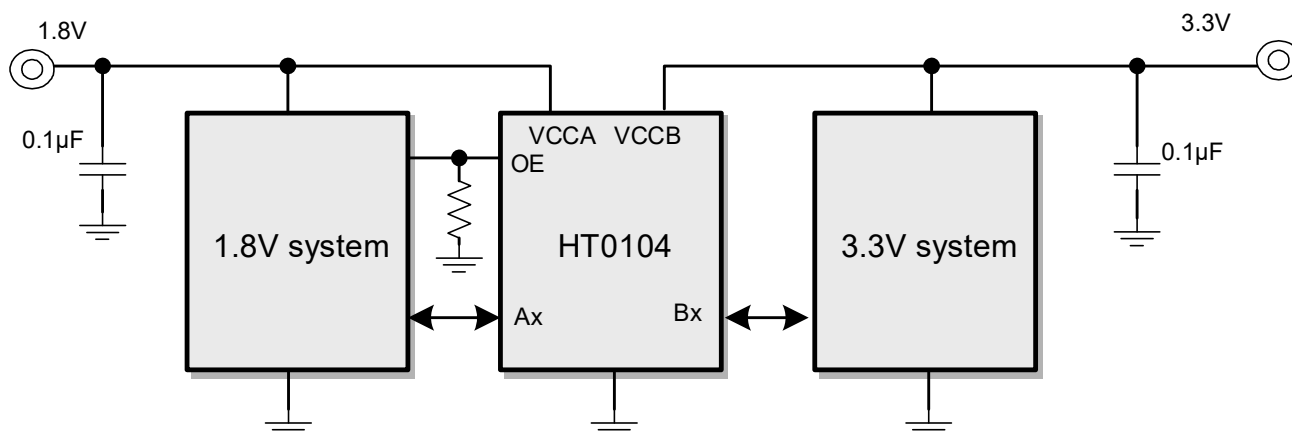
HT0104 is a quad channel bidirectional translator with two separate power supply V_{CCA} and V_{CCB} . The low voltage signal present on A port with operating voltage from 1.65V to 5.5V referenced to V_{CCA} , and the high voltage signal present on B port with operating voltage from 2.3V to 5.5V referenced to V_{CCB} .

HT0104 enters a low current consumption mode with all IOs places in Hi-Z, once the OE pin is pulled low.

HT0104是一款4路双向电平转换器, 其使用两个独立的供电 V_{CCA} 和 V_{CCB} 。电压较低的电平信号接入A端口, 支持1.65V~5.5V电压, 其对应 V_{CCA} ; 电压较高的电平信号接入B端口, 支持2.3V~5.5V电压, 其对应 V_{CCB} 。

当OE脚拉低时, HT0104进入低功耗模式, 所用IO进入高阻状态。

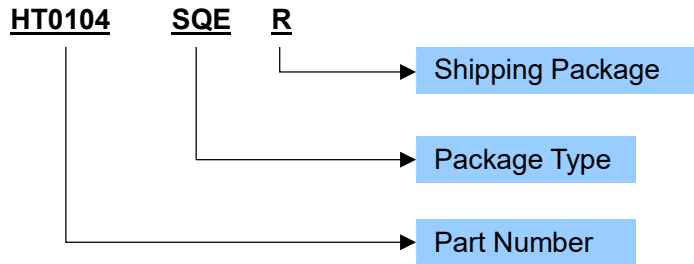
■ TYPICAL APPLICATION



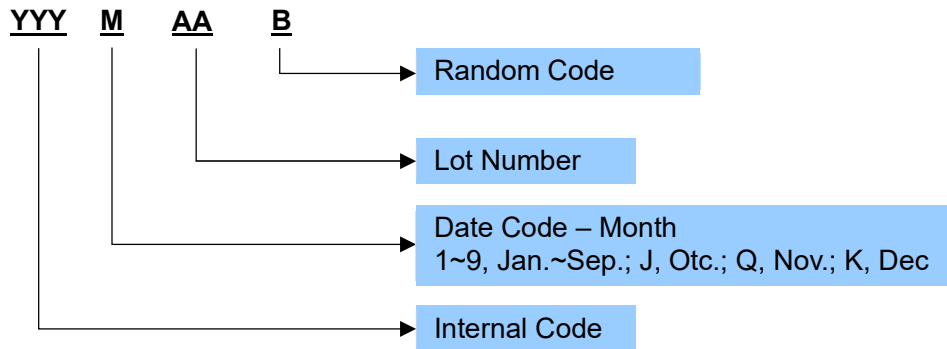
ORDERING INFORMATION

Ordering Number	Package Type	Marking	Operating Temperature Range	Shipping Package / MOQ
HT0104SQER	QFN14L-3.5×3.5 (SQE)	HT0104 YYYMAAB ¹	-40°C ~ 85°C	Tape and Reel / 5000pcs
HT0104MTNR	TSSOP14L (MTN)	HT0104 YYYMAAB	-40°C ~ 85°C	Tape and Reel / 3000pcs

Ordering Number

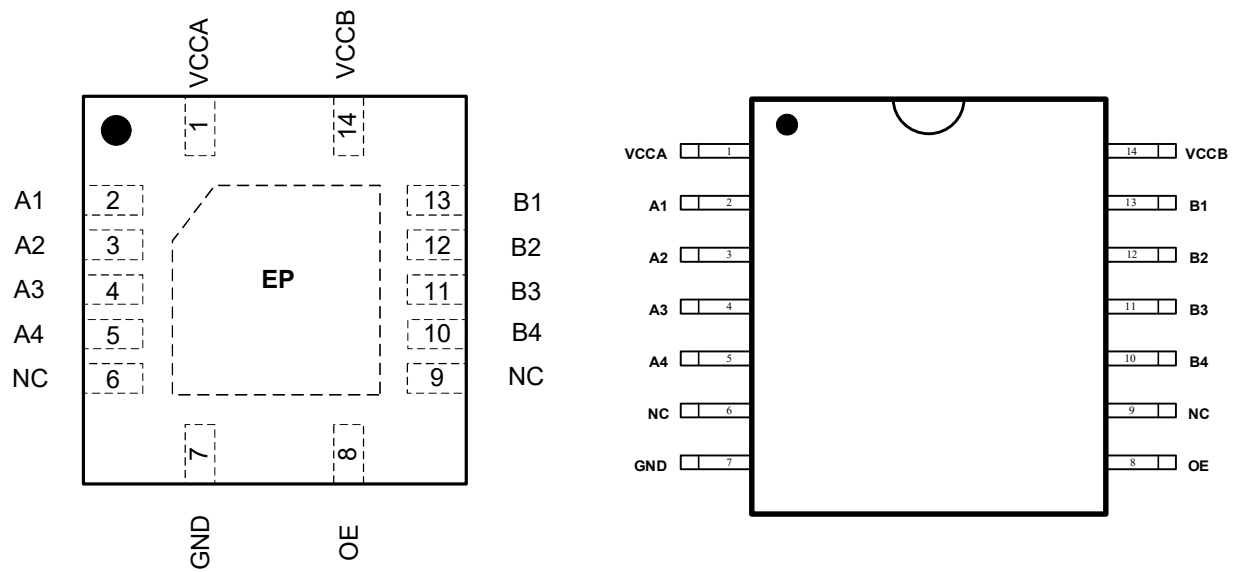


Production Tracking Code



¹ YYYMAAB is production tracking code

■ TERMINAL CONFIGURATION



■ TERMINAL FUNCTION

Terminal No.		Name	I/O	Description
SQE	MTN			
1	1	VCCA	-	A port power supply, $1.65V \leq VCCA \leq 5.5V$ and $VCCA \leq VCCB$
2	2	A1	I/O	Input/Output A1, referenced to VCCA
3	3	A2	I/O	Input/Output A2, referenced to VCCA
4	4	A3	I/O	Input/Output A3, referenced to VCCA
5	5	A4	I/O	Input/Output A4, referenced to VCCA
6	6	NC	-	No connection
7	7	GND	-	Ground
8	8	OE	I	Pull OE low to place all outputs in Hi-Z.
9	9	NC	-	No connection
10	10	B4	I/O	Input/Output B4, referenced to VCCB
11	11	B3	I/O	Input/Output B3, referenced to VCCB
12	12	B2	I/O	Input/Output B2, referenced to VCCB
13	13	B1	I/O	Input/Output B1, referenced to VCCB
14	14	VCCB	-	B port power supply, $2.3V \leq VCCB \leq 5.5V$
EP	-	NC	-	No connection

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