

EJ168A Datasheet

USB 3.0 Host Controller

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THXTEK TECHNOLOGY

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Revision History

Revision	Date	Description
1.1	March 5, 2015	Initial release
1.2	May 6, 2016	<ul style="list-style-type: none">• Added Disclaimer.• Revised document layout.
1.3	June 8, 2016	<ul style="list-style-type: none">• Added Chip Marking.• Added Packing Information.
1.4	Nov 05,2019	<ul style="list-style-type: none">• Modify document form

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Contents

1	Introduction	5
2	Features	6
3	Pin Assignment and Description	7
4	Register Interface	10
4.1	PCI Configuration Registers (USB).....	10
4.2	Host Controller Capability Registers	24
4.3	Host Controller Operational Registers	29
4.4	Host Controller Runtime Registers	58
4.5	Doorbell Registers.....	61
4.6	xHCI Extended Capabilities	63
5	Electrical Characteristics	67
6	Package Information	68
6.1	Package Dimension	68
6.2	Chip Marking	70
7	Packing Information	71
7.1	Packing Procedure for Tray.....	71
7.2	Specification of Shipping Box.....	72
7.3	Quantity of Container	74

1 Introduction

The EJ168A is a PCIe Gen2 to Universal Serial Bus 3.0 host controller, which complies with PCIe Gen2 specification, USB3.0 specification and eXtensible Host Controller Interface (xHCI) 1.0.

The EJ168A has a PCIe Gen2 x1 lane for the PC host system and two USB3.0 downstream ports, which provide SuperSpeed, HighSpeed, FullSpeed and LowSpeed signals for USB 3.0 compliant peripherals and existing USB 2.0/1.1 peripheral devices.

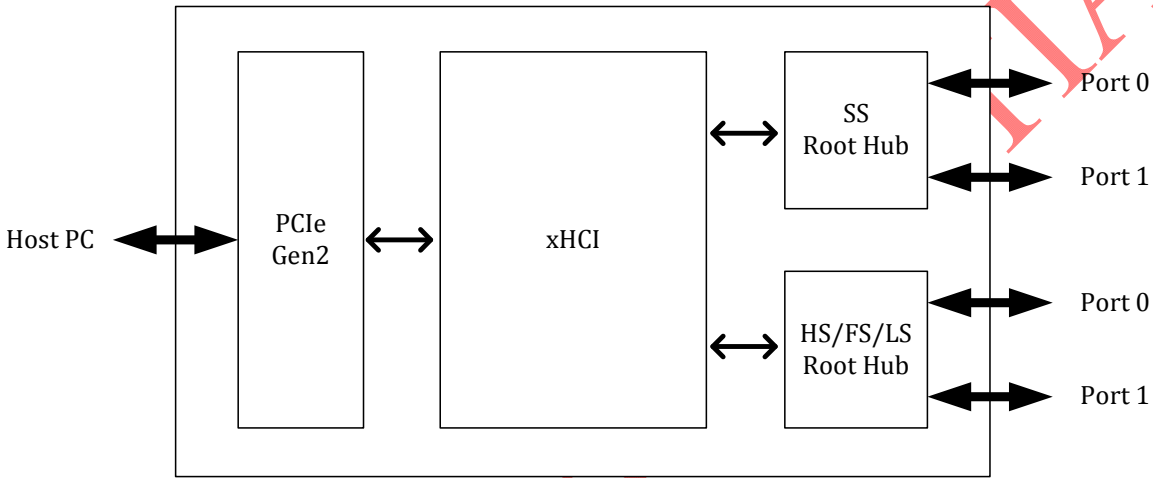


Figure 1-1. EJ168A Block Diagram

2 Features

■ Host Interface

- Compliant with the PCI Express Base Specification Revision 2.0
- Supports the PCI Bus Power Management Interface Specification Revision 1.2
- Supports the SPI/I2C type ROM/flash
- System clock uses either 25MHz crystal or external clock
- 3.3V for I/O power and 1.2V for core power

■ USB interface

- Compliant with eXtensible Host Controller Interface (xHCI) Specification revision 1.0
- Compliant with the Universal Serial Bus 3.0 specification Revision 1.0
 - Two downstream USB3.0 ports
 - Supports data rate:
 - i. LowSpeed (1.5 Mbps)
 - ii. FullSpeed (12 Mbps)
 - iii. HighSpeed (480 Mbps)
 - iv. SuperSpeed (5 Gbps)
 - Supports USB data transfer types:
 - i. Control
 - ii. Bulk(stream)
 - iii. Interrupt
 - iv. Isochronous transfer

■ Package

- 100-TQFP (14mm x 14mm)

3 Pin Assignment and Description

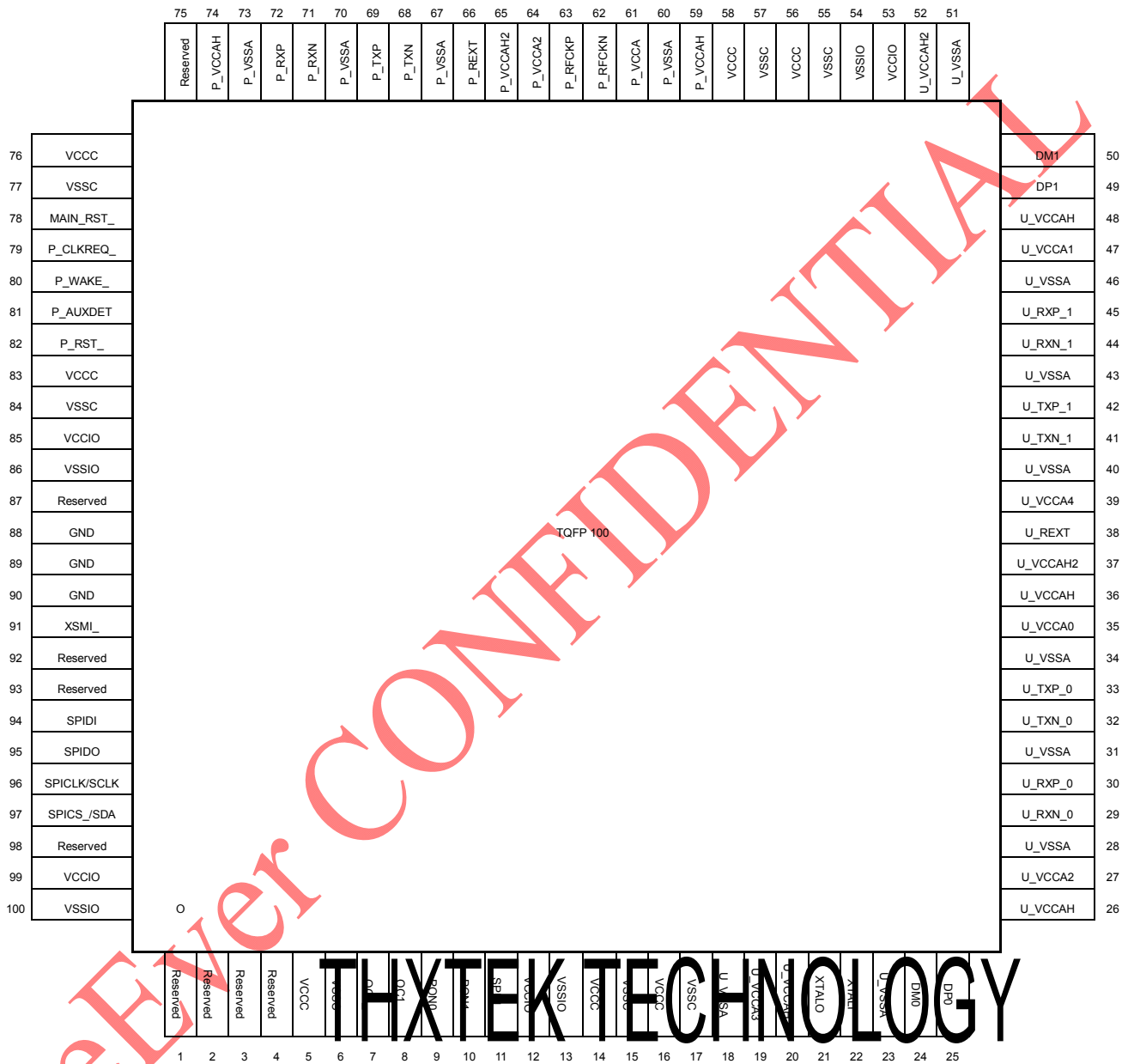
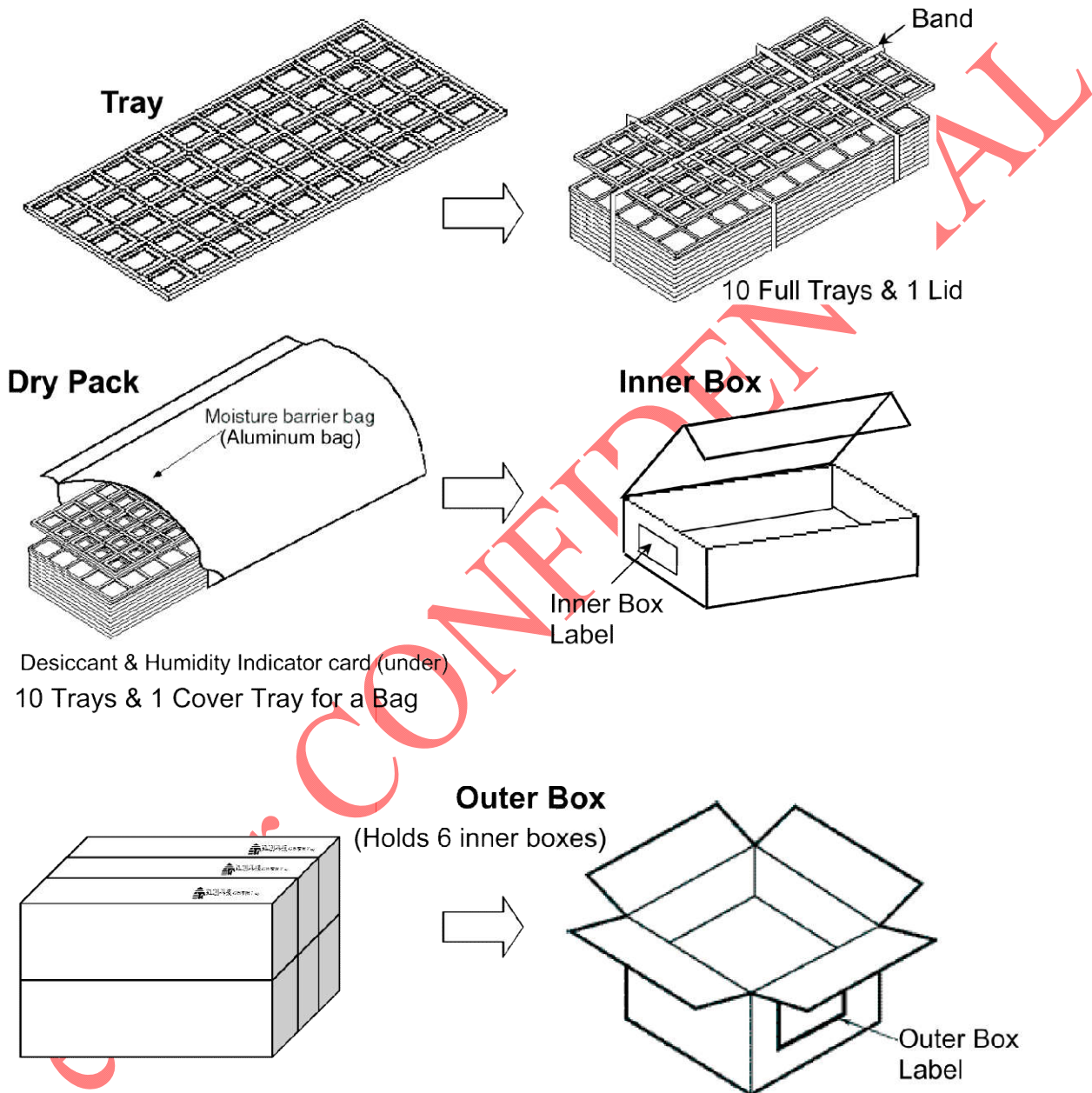


Figure 3-1. EJ168A Pin Assignment

7 Packing Information

7.1 Packing Procedure for Tray

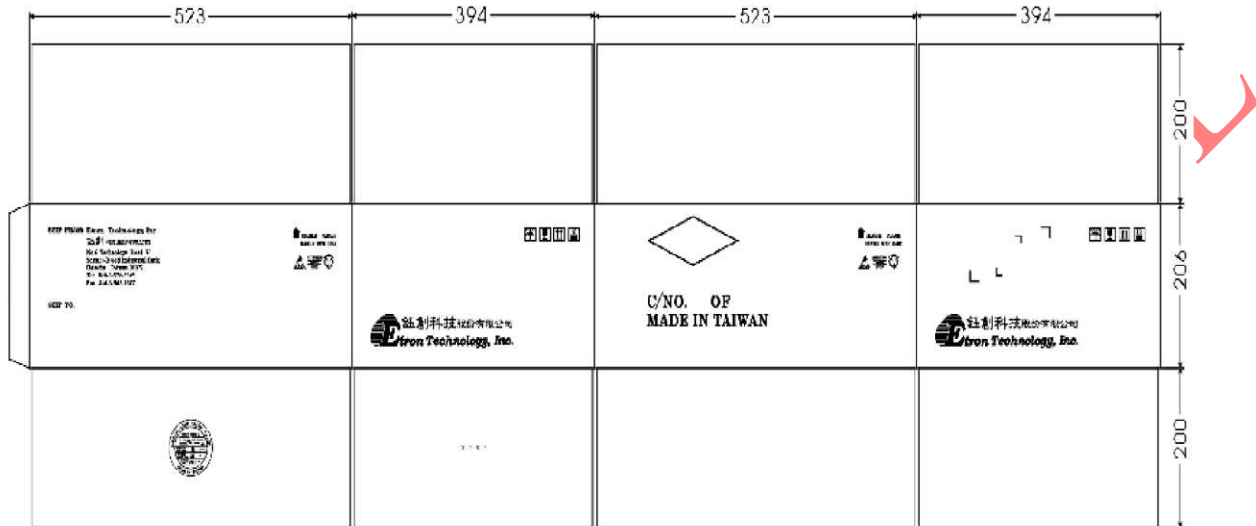


7.2 Specification of Shipping Box

7.2.1 Tray Outer Box

Unit: mm

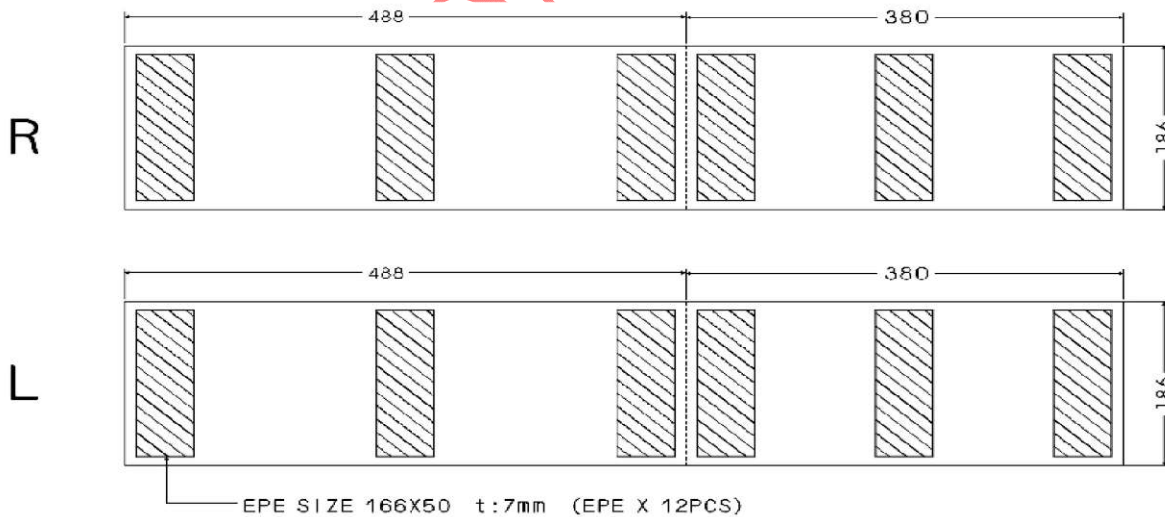
Tolerance: +/-5mm



7.2.2 Tray Outer Box Buffer

Unit: mm

Tolerance: +/-3mm



7.3 Quantity of Container

The quantity for each container is described as below table for reference.

Package Type	Packing Quantity	Dry Bag	Inner Box	Outer Box
14x14 100/128L TQFP	90 ea/Tray	10 Tray (900 ea)	1 Dry Bag (900 ea)	6 Inner Boxes (5400 ea)

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