

Switch ICs

2:1 MIPI D-PHY (4.5GHz) 4-Data Lane & C-PHY (4.5GHz) 3-Data Lane Switch



AS3646B

● General Description

The AS3646B is a four data lane D-PHY or three data lane C-PHY, MIPI switch. This single pole, double throw (SPDT) switch is optimized for switching between two high speed or low power MIPI sources. The AS3646B is designed for the MIPI specification and allows connection to a CSI or DSI module.

The AS3646B is compatible with the requirements of Mobile Industry Processor Interface (MIPI). The low-capacitance design allows the AS3646B to switch signals that exceed 4.5GHz in frequency. Superior channel-to-channel crosstalk immunity minimizes interference and allows the transmission of high-speed differential signals and single-ended signals, as described by the MIPI specification, Compatible with TMUX646 & FSA646.

The AS3646B is offered in Green 36-ball WLCSP package and is specified over an ambient temperature range of -40°C to 85°C.

● Features

- Switch Type: SPDT (10x)
- Signal Types: --MIPI, D-PHY & C-PHY
- Wide V_{CC} Range: 1.5V to 5.0V
- Input Signals: 0 to 1.3V
- R_{ON}:
 - 6.0Ω Typical LP & HS MIPI
- ΔR_{ON} : 0.1Ω Typical LP & HS MIPI
- ΔR_{ON_FLAT}: 0.5Ω Typical LP & HS MIPI
- I_{CCZ}: 1uA Maximum
- I_{CC}: 30uA Typical
- O_{IRR}: -28dB Typical
- -3dB Bandwidth: 4.5GHz (Typical)
- Xtalk: -30dB Typical
- C_{ON}: 1.5pF Typical
- Skew of Opposite Transitions of the Same Output: 6ps Typical
- RoHS and Green Compliant
- 36B, 2.38mm X 2.38mm WLCSP Packages
- -40°C to +85 °C Temperature Range

● Applications

- Dual Camera for Smart Phones
- Dual LCD Monitor, Digital Camera Displays
- Tablet PCs & Laptops & Displays

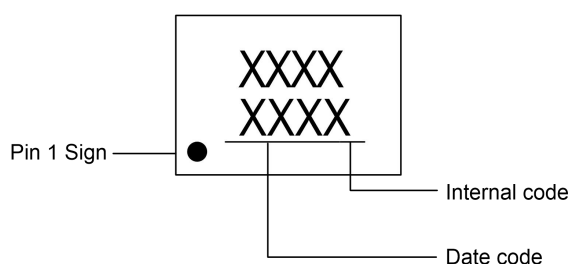
● Ordering Information



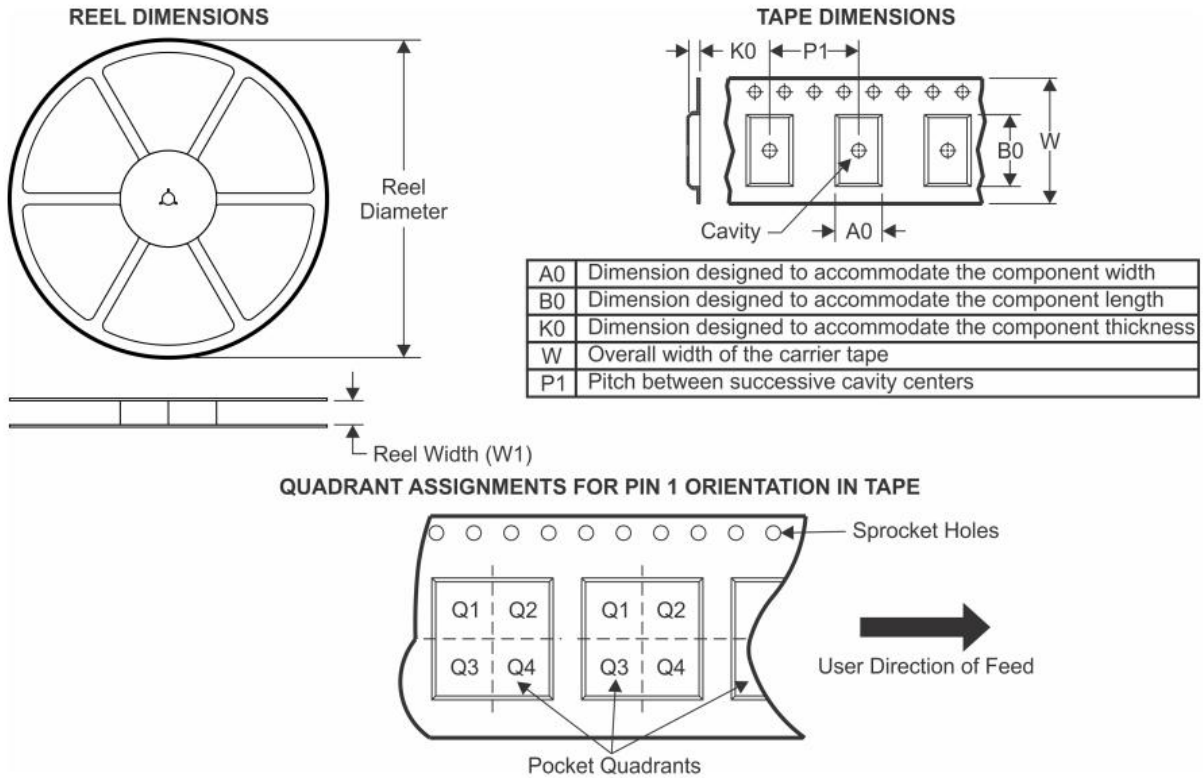
Part Number	Data	Package Type	Package Qty	Temperature	Eco Plan
AS3646BBRN	2:1 SPDT (4.5GHz)	WLCSP-36B	7-in reel 3000pcs/reel	-40~85°C	Green

● Marking Information

WLCSP-36B:



■ **Tape and Reel Information**



Device	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
AS3646BBRN	180.0	8.5	2.60	2.60	0.8	4.0	8.0	Q1

*All dimensions are nominal