

Switch ICs

2:1 MIPI D-PHY (4.0GHz) 4-Data Lane Switch



AS3644

● General Description

The AS3644 is a four data lane MIPI, D-PHY switch. This single pole, double throw (SPDT) switch is optimized for switching between two high speed or low power MIPI sources. The AS3644 is designed for the MIPI specification and allows connection to a CSI or DSI module.

The AS3644 is compatible with the requirements of Mobile Industry Processor Interface (MIPI). The low-capacitance design allows the AS3644 to switch signals that exceed 2.0Gbps 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.

The AS3644 is offered in Green 36-ball WLCSP package and is specified over an ambient temperature range of -40°C to 85°C.

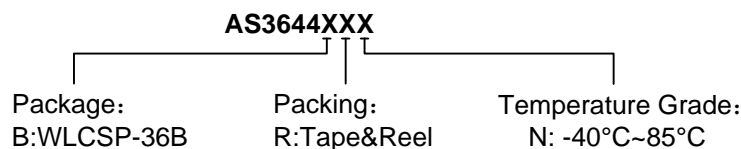
● Features

- Switch Type: SPDT (10x)
- Signal Types: --MIPI, D-PHY
- Wide V_{CC} Range: 1.5V to 4.5V
- Input Signals: 0 to V_{CC}
- R_{ON}:
 - 6Ω Typical LP & HS MIPI
- ΔR_{ON} : 0.6Ω Typical LP & HS MIPI
- ΔR_{ON_FLAT}: 0.5Ω Typical LP & HS MIPI
- I_{CCZ}: 0.5uA Maximum
- I_{CC}: 30uA Typical
- O_{IRR}: -30dB Typical
- -3dB Bandwidth: 4.0GHz (Typical)
- Xtalk: -38dB Typical
- C_{ON}: 2.7pF 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
- Media Tablets/Storage & Peripherals
- Wireless LAN Card & Broadband Access
- PMP/MP3 Players

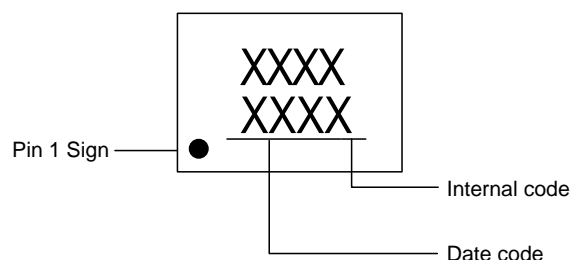
● Ordering Information



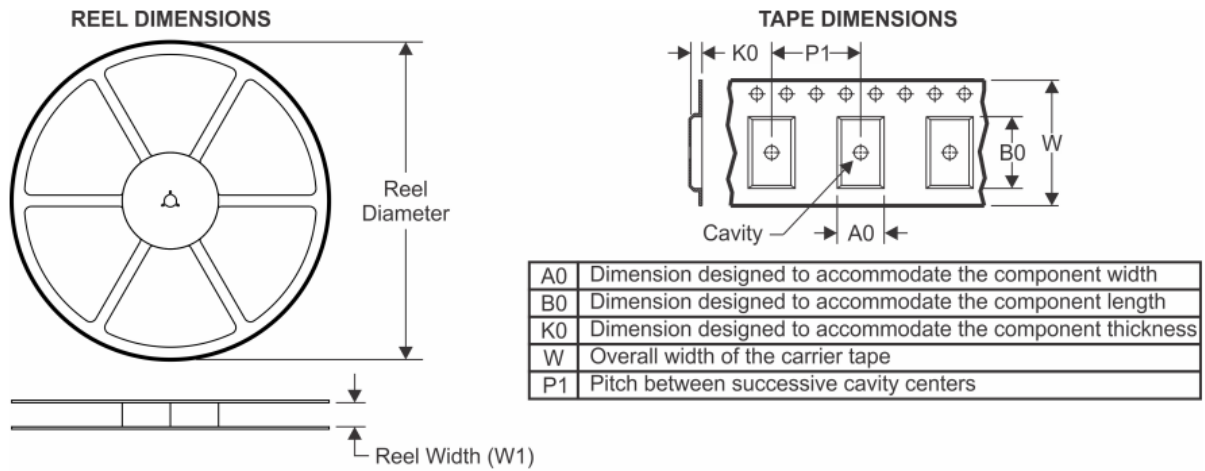
Part Number	Data	Package Type	Package Qty	Temperature	Eco Plan
AS3644BRN	2:1 SPDT (4.0GHz typical)	WLCSP-36B	7-in reel 3000pcs/reel	-40~85°C	Green

● Marking Information

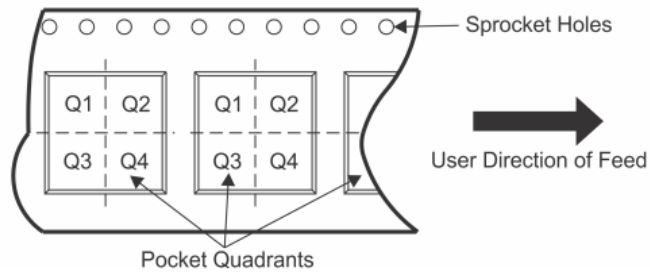
WLCSP-36B:



■ **Packing Information**



QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



Device	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
AS3644BRN	180.0	8.5	2.60	2.60	0.8	4.0	8.0	Q1

*All dimensions are nominal