Switch ICs

2:1 MIPI D-PHY (1.5Gbps) 4-Data Lane Switch

AS3644A

General Description

The AS3644A 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 AS3644A is designed for the MIPI specification and allows connection to a CSI or DSI module.

The AS3644A is compatible with the requirements of Mobile Industry Processor Interface (MIPI). The low-capacitance design allows the AS3644A to switch signals that exceed 750MGHz 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 AS3644A 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 HS MIPI
  - -- 6Ω Typical LP MIPI
- $\triangle R_{ON}$: 0.6Ω Typical LP & HS MIPI
- R_{ON_FLAT}: 0.3Ω Typical LP &HS MIPI
- I_{CCZ}: 0.5uA Maximum
- I_{CC}: 30uA Typical
- O_{IRR}: -30dB Typical
- Bandwidth: 1.5GHz
- Xtalk: -38dB Typical
- C_{ON}: 3.2pF Typical
- Skew of Opposite Transitions of the Same Output: 6ps Typical
- RoHS and Green Compliant
- 36B, 2.38mm X 2.38mm WLCSP Packages
- -40℃ to +85 ℃ 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

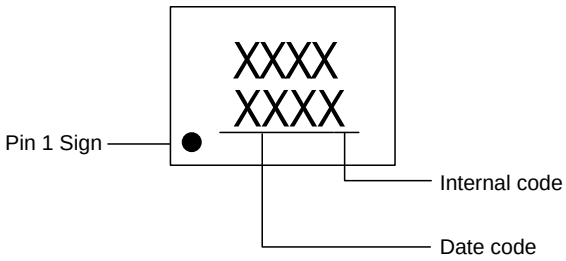
AS3644AXXX

Package:	Packing:	Temperature Grade:
B:WLCSP-36B	R:Tape&Reel	N: -40°C~85°C

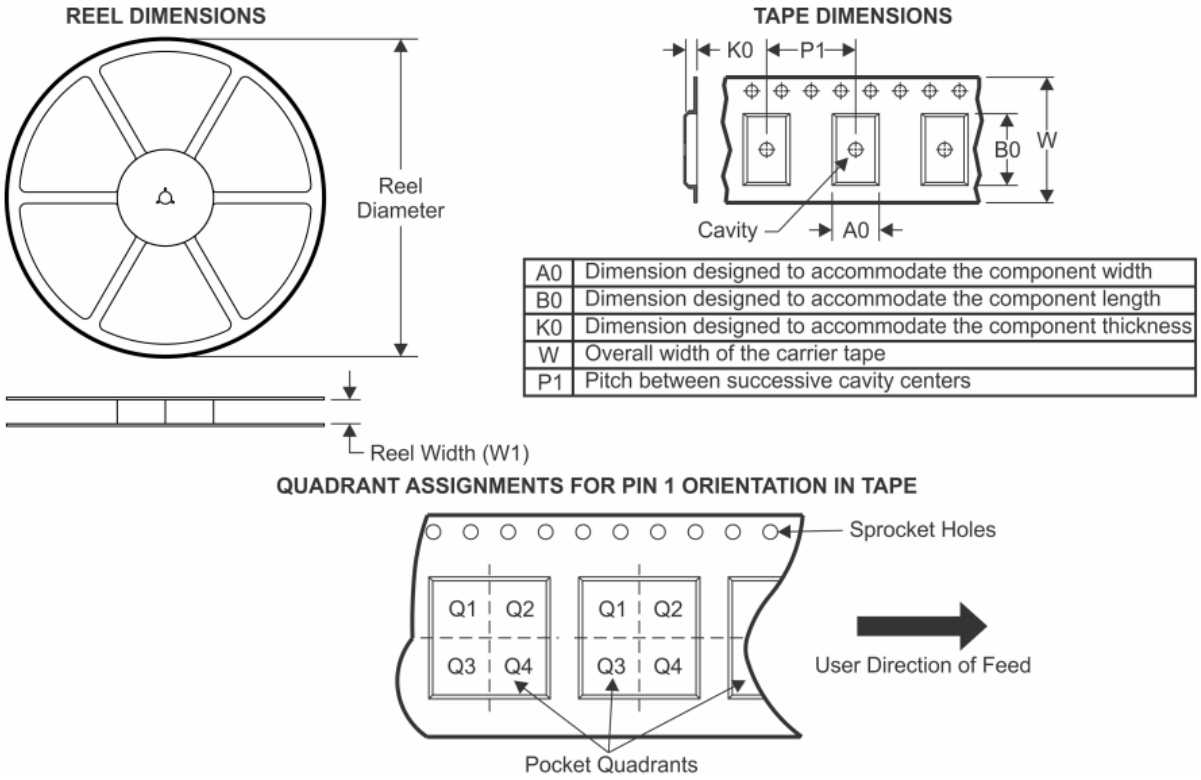
Part Number	Data	Package Type	Package Qty	Temperature	Eco Plan
AS3644ABRN	2:1 SPDT (1.5Gbps)	WLCSP-36B	7-in reel 3000pcs/reel	-40～85℃	Green

Marking Information

WLCSP-36B:



■ Packing Information



A0	Dimension designed to accommodate the component width
B0	Dimension designed to accommodate the component length
K0	Dimension designed to accommodate the component thickness
W	Overall width of the carrier tape
P1	Pitch between successive cavity centers

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