



# PCIe MINI CARD

## YBTE2N9283-26

2 x 2 802.11N Single-band MIMO mini-PCIe

### Features

- Atheros XSPAN family chipset
- IEEE 802.11n compliant and backward compatible with 802.11b/g
- 2.4GHz Single-band 2 x 2 MIMO spatial multiplexing technique
- Maximum output power 23dBm@802.11b/g -26dBm MIMO aggregate
- Supports up to 300Mbps physical data rates
- Delivers up to 10 times the throughput and nearly twice the range of legacy 802.11b/g networks
- Transmission Power Control (IEEE 802.11h TPC)
- Supports spatial multiplexing and maximal ratio combining (MRC)
- Multi-Country Roaming Supported (IEEE802.11d Global Harmonization Standard)
- 2 x U.FL Antenna Connector
- Complaint with PCI-Express Mini Card 1.1 Standard
- Supports 802.11x authentication, 64/128/152Bit WEP, IEEE802.11i encryption

Technical Specifications											
Chipset	AR9283										
Host Interface	PCI –Express 1.1 Standard										
Operating Voltage	3.3 VDC										
Power Consumption	2.6W										
Antenna Connector	2 x U.FL Antenna Connector										
Standards	IEEE 802.11b :	11Mbps	5.5Mbps	2Mbps	1Mbps						
	IEEE 802.11g :	54Mbps	48Mbps	36Mbps	24Mbps	18Mbps	12Mbps	9Mbps	6Mbps	automatically	
		Fallback to 5.5Mbps, 2Mbps, 1Mbps									
	IEEE 802.11n :	20MHz	1Nss: 65Mbps @ 800GI, 72.2Mbps @ 400GI (Max.) 2Nss: 130Mbps @ 800GI, 144.4Mbps @ 400GI (Max.)								
		40MHz	1Nss: 135Mbps @ 800GI, 150Mbps @ 400GI (Max.) 2Nss: 270Mbps @ 800GI, 300Mbps @ 400GI (Max.)								
Frequency Range	IEEE 802.11b/g/n:	2.412GHz ~ 2.462GHz (US & Canada) 2.412GHz ~ 2.472GHz (Europe) 2.412GHz ~ 2.484GHz (Japan)									
Modulation Techniques	OFDM: BPSK, QPSK, 16 QAM, 64QAM DSSS: DBPSK, DQPSK, CCK										
ROHS Compliance	Yes										
Environment Specifications	Operating: -20°C to 70°C Storage: -40°C to 90°C										
Humidity	5% to 95% (non-condensing)										
Dimension	50.95mm x 30 mm x 3.2 mm (H x W x D)										

YBTE2N9283-26 PCIe Mini CARD RADIO										
TX SPECIFICATIONS										
	DataRate	TX Power (per chain)	TX Power (2 chains)	Tolerance		DataRate	TX Power (per chain)	TX Power (2 chains)	Tolerance	
802.11b	11Mbps	23dBm	26dBm	±2dB	802.11g	6-24Mbps	23dBm	26dBm	±2dB	
	5.5Mbps	23dBm	26dBm	±2dB		36Mbps	22dBm	25dBm	±2dB	
	2Mbps	23dBm	26dBm	±2dB		48Mbps	20dBm	23dBm	±2dB	
	1Mbps	23dBm	26dBm	±2dB		54Mbps	19dBm	22dBm	±2dB	
	DataRate	TX Power (per chain)	TX Power (2 chains)	Tolerance		DataRate	TX Power (per chain)	TX Power (2 chains)	Tolerance	
2.4GHz 11n HT20	MCS 0/8	23dBm	26dBm	±2dB	2.4GHz 11n HT40	MCS 0/8	23dBm	26dBm	±2dB	
	MCS 1/9	23dBm	26dBm	±2dB		MCS 1/9	23dBm	26dBm	±2dB	
	MCS 2/10	23dBm	26dBm	±2dB		MCS 2/10	23dBm	26dBm	±2dB	
	MCS 3/11	22dBm	25dBm	±2dB		MCS 3/11	22dBm	25dBm	±2dB	
	MCS 4/12	21dBm	24dBm	±2dB		MCS 4/12	21dBm	24dBm	±2dB	
	MCS 5/13	20dBm	23dBm	±2dB		MCS 5/13	20dBm	23dBm	±2dB	
	MCS 6/14	19dBm	22dBm	±2dB		MCS 6/14	19dBm	22dBm	±2dB	
	MCS 7/15	18dBm	21dBm	±2dB		MCS 7/15	18dBm	21dBm	±2dB	
RXSPECIFICATIONS										
	DataRate	Sensitivity (2 chains)		Tolerance		DataRate	Sensitivity (2 chains)		Tolerance	
802.11g	6 Mbps	-96dBm		±2dB	802.11g	24Mbps	-90dBm		±2dB	
	9 Mbps	-96dBm		±2dB		38Mbps	-87dBm		±2dB	
	12 Mbps	-95dBm		±2dB		48Mbps	-83dBm		±2dB	
	18 Mbps	-93dBm		±2dB		54Mbps	-81dBm		±2dB	
2.4GHz 11n HT20	MCS0	-96dBm		±2dB	2.4GHz 11n HT40	MCS0	-92dBm		±2dB	
	MCS1	-94dBm		±2dB		MCS1	-90dBm		±2dB	
	MCS2	-91dBm		±2dB		MCS2	-87dBm		±2dB	
	MCS3	-87dBm		±2dB		MCS3	-86dBm		±2dB	
	MCS4	-85dBm		±2dB		MCS4	-84dBm		±2dB	
	MCS5	-82dBm		±2dB		MCS5	-82dBm		±2dB	
	MCS6	-81dBm		±2dB		MCS6	-81dBm		±2dB	
MCS7	-79dBm		±2dB	MCS7	-77dBm		±2dB			

Ordering Information<sup>①</sup>

Model Code	Chipset	Form Factor	CARD INFORMATION
YBTE2N9283-26	AR9283	Full Size	802.11 b/g/n PCIe mini card

DIMENSIONS DRAWING

