



# Full-size PCIe MIN CARD

## YBTE9580/9590NX

Dual-band 802.11n MIMO 3 x 3 mini PCIe

### Features

- Atheros XB116 reference design
- Maximum 20dBm output power(per chain)/ 25dBm(aggregate)
- Single 3.3V power
- IEEE 802.11n compliant and backward compatible with 802.11a/b/g
- Dual-band 3 x 3 MIMO spatial multiplexing technique
- Supports up to 450Mbps physical data rates
- Atheros XSPAN family chipset with SST3™, which increase the link rate by ~100% at short range, ~50% at mid range and ~25% at long range
- Supports Spatial Multiplexing, cyclic-delay diversity (CDD), low-density parity check (LDPC), maximum ratio combining (MRC), space time block code (STBC) and Tx beamforming (TxBF)
- Dynamic Frequency Selection (DFS)
- Multi-Country Roaming Supported (IEEE802.11d Global Harmonization Standard)
- 3 x U.FL Antenna Connector
- Supports 802.11x authentication, 64/128/152Bit WEP, IEEE802.11i encryption
- Supports Windows 7, Windows Vista, Windows XP operating system

Technical Specifications											
Chipset	AR9580/AR9590										
Host Interface	PCI-Express 1.1 Standard										
Operating Voltage	3.3 VDC										
Power Consumption	3.5W										
Antenna Connector	3 x U.FL Antenna Connector										
Data Rate	IEEE 802.11a :	54Mbps	48Mbps	36Mbps	24Mbps	18Mbps	12Mbps	9Mbps	6Mbps		
	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.)								
	3Nss: 195Mbps @ 800GI, 216.6Mbps @ 400GI (Max.)										
	40MHz	1Nss: 135Mbps @ 800GI, 150Mbps @ 400GI (Max.)									
		2Nss: 270Mbps @ 800GI, 300Mbps @ 400GI (Max.)									
		3Nss: 405.5Mbps @ 800GI, 450Mbps @ 400GI (Max.)									
Frequency Range	IEEE802.11b/g/n:	2.412GHz ~ 2.462GHz (US & Canada)									
		2.412GHz ~ 2.472GHz (Europe)									
		2.412GHz ~ 2.484GHz (Japan)									
	IEEE 802.11a/n:	5.150 ~ 5.350 GHz, 5.470 ~ 5.725GHz, 5.725 ~ 5.850 GHz (US & Canada)									
		5.150 ~ 5.350 GHz, 5.470 ~ 5.725GHz, 5.725 ~ 5.875 GHz (Europe)									
	5.150 ~ 5.250 GHz, 5.250 ~ 5.350GHz, 5.470 ~ 5.725GHz (Japan)										
Modulation Techniques	OFDM: BPSK, QPSK, 16-QAM, 64-QAM DSSS: DBPSK, DQPSK, CCK										
RoHS Compliance	Yes										
Temperature Range	Operating: -20°C to 70°C Storage: -40°C to 90°C										
Humidity	Operating: 5% to 95% (non-condensing) Storage: Max. 90% (non-condensing)										
Dimensions	50.95mm x 30 mm x 3.2 mm (H x W x D)										

**YBTE9580/9590NX PCIe Mini CARD RADIO**

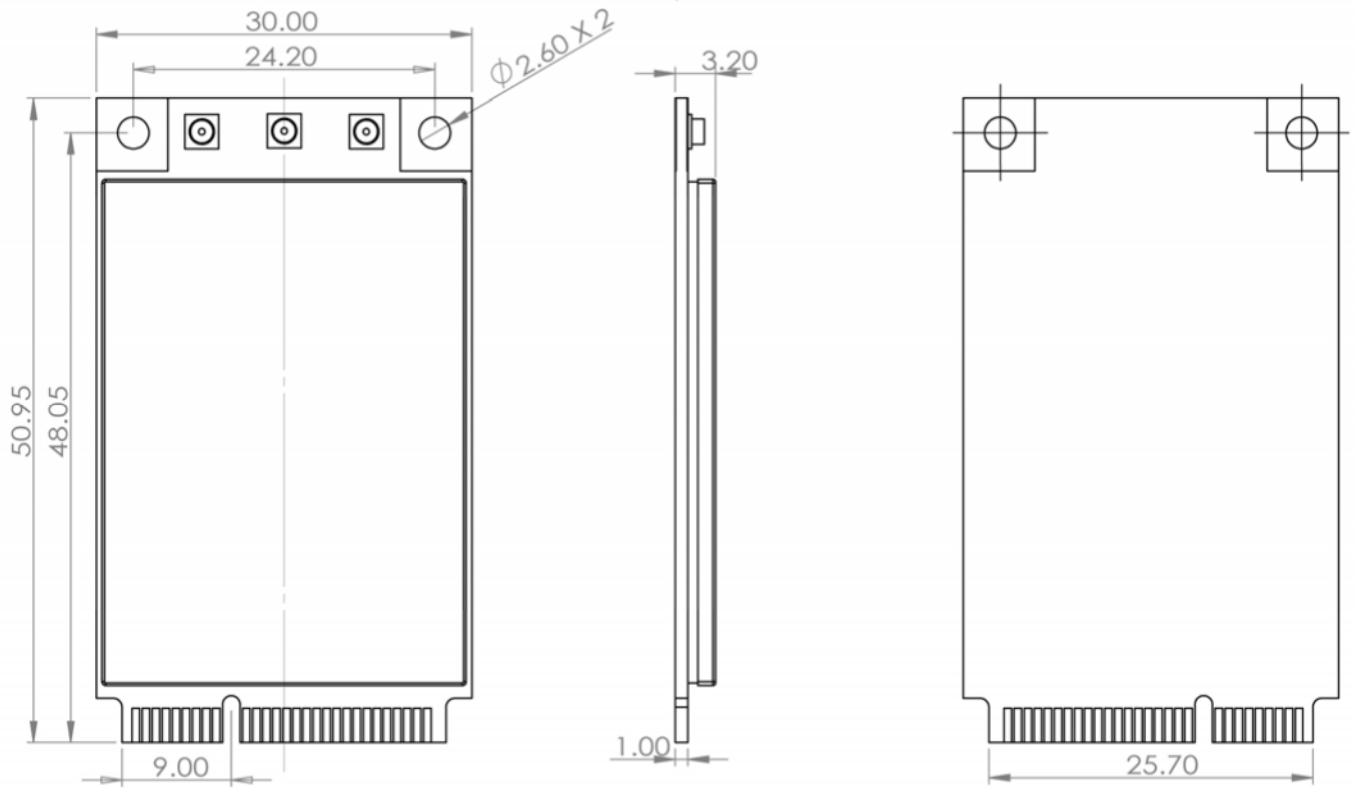
**TX SPECIFICATIONS**

	DataRate	TX Power (per chain)	TX Power (3 chains)	Tolerance		DataRate	TX Power (per chain)	TX Power (3 chains)	Tolerance
802.11a	6Mbps	20dBm	25dBm	±2dB	802.11b/g	6Mbps	19dBm	24dBm	±2dB
	54Mbps	15dBm	20dBm	±2dB		54Mbps	16dBm	21dBm	±2dB
	DataRate	TX Power (per chain)	TX Power (3 chains)	Tolerance		DataRate	TX Power (per chain)	TX Power (3 chains)	Tolerance
2.4GHz 11n HT20	MCS 0	19dBm	24dBm	±2dB	2.4GHz 11n HT40	MCS 0	17dBm	22dBm	±2dB
	MCS 7	15dBm	20dBm	±2dB		MCS 7	15dBm	20dBm	±2dB
	MCS 8	19dBm	24dBm	±2dB		MCS 8	17dBm	22dBm	±2dB
	MCS 15	15dBm	20dBm	±2dB		MCS 15	15dBm	20dBm	±2dB
	MCS 16	19dBm	24dBm	±2dB		MCS 16	17dBm	22dBm	±2dB
	MCS 23	15dBm	20dBm	±2dB		MCS 23	14dBm	19dBm	±2dB
5GHz 11n HT20	MCS 0	20dBm	25dBm	±2dB	5 GHz 11n HT40	MCS 0	19dBm	24dBm	±2dB
	MCS 7	14dBm	19dBm	±2dB		MCS 7	14dBm	19dBm	±2dB
	MCS 8	20dBm	25dBm	±2dB		MCS 8	19dBm	24dBm	±2dB
	MCS 15	14dBm	19dBm	±2dB		MCS 15	14dBm	19dBm	±2dB
	MCS 16	20dBm	25dBm	±2dB		MCS 16	19dBm	24dBm	±2dB
	MCS 23	13dBm	18dBm	±2dB		MCS 23	13dBm	18dBm	±2dB

**RX SPECIFICATIONS**

	DataRate	Sensitivity	Tolerance		DataRate	Sensitivity	Tolerance
802.11a	6M	-94dBm	±2dB	802.11g	6M	-95dBm	±2dB
	54M	-81dBm	±2dB		54M	-81dBm	±2dB
2.4GHz 11n HT20	MCS 0	-95dBm	±2dB	2.4GHz 11n HT40	MCS 0	-91dBm	±2dB
	MCS 7	-76dBm	±2dB		MCS 7	-73dBm	±2dB
	MCS 8	-92dBm	±2dB		MCS 8	-90dBm	±2dB
	MCS 15	-73dBm	±2dB		MCS 15	-71dBm	±2dB
	MCS 16	-91dBm	±2dB		MCS 16	-89dBm	±2dB
	MCS 23	-71dBm	±2dB		MCS 23	-69dBm	±2dB
5 GHz 11n HT20	MCS 0	-94dBm	±2dB	5 GHz 11n HT40	MCS 0	-91dBm	±2dB
	MCS 7	-76dBm	±2dB		MCS 7	-71dBm	±2dB
	MCS 8	-93dBm	±2dB		MCS 8	-89dBm	±2dB
	MCS 15	-73dBm	±2dB		MCS 15	-69dBm	±2dB
	MCS 16	-91dBm	±2dB		MCS 16	-87dBm	±2dB
	MCS 23	-71dBm	±2dB		MCS 23	-67dBm	±2dB

DIMENSIONS DRAWING



苏州跃冠电子科技有限公司  
地址：苏州城北西路 1599 号 D7-122  
电话：0512-65838920  
传真：0512-65838921  
手机：18994318920((  
业务 QQ：2272655949((