

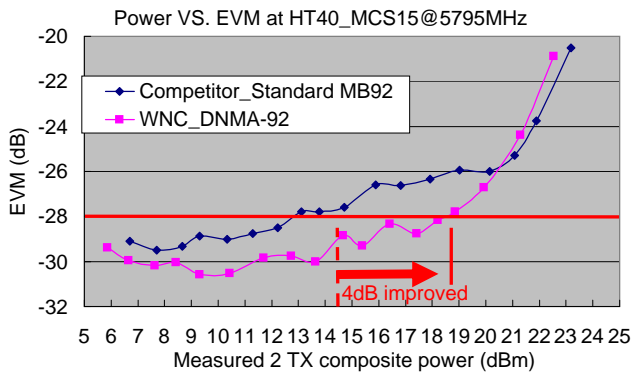
Feature



Key Features and Benefits

- Atheros MB92 SOC solution, AR9220, Cost effective solution
- **4dB TX linearity improved from standard MB92 at 5.7-5.8GHz HT40 mode.**
- Dual band support, 802.11a/b/g/n
- Single 3.3Vdc supply
- Data rate up to 130Mbps@20MHz bandwidth and 300Mbps@40MHz bandwidth 2x2 MIMO technology
- Mini-PCI IIIA type form factor
- 2 x SMT ultra-miniature coaxial connectors
- Operation temp. : 0~60 degrees C

I EVM improved @5.7 - 5.8GHz@HT40@MCS15



II Current consumption

Condition	3.3V supply only		Unit
	AVG	MAX	
11b Cont. Tx@19dBm 2M	550	650	mA
11g Cont. Tx@19.5dBm 6M	450	550	
11a Cont. Tx@18dBm 6M	500	600	
11ng Cont. Tx@18dBm HT20 MCS0	450	550	
11ng Cont. Tx@18dBm HT40 MCS0	500	600	
11na mode Cont. TX@18dBm HT20 MCS0	500	600	
11na Cont. TX@16.5dBm HT20 MCS0	480	580	
11g Cont. RX	150	200	
11a Cont. RX	150	200	
Standby	150	200	

III Average TX power

(Typical composite power level (2TX) , unit:dBm)

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20MHz BW	MHz		
	2412	2437	2472
1Mbps	20	19.5	19
2Mbps	21	20.5	20
5.5Mbps	21	21	21
11Mbps	21	21	21
6Mbps	23	23	23
9Mbps	23	23	23
12Mbps	23	23	23
18Mbps	23	23	23
24Mbps	23	23	23
36Mbps	22	22	22
48Mbps	22	22	22
54Mbps	21	21	21
HT20MCS0/8	21	21	21
HT20MCS1/9	21	21	21
HT20MCS2/10	21	21	21
HT20MCS3/11	21	21	21
HT20MCS4/12	21	21	21
HT20MCS5/13	21	21	21
HT20MCS6/14	19	19	19
HT20MCS7/15	17	17	17

40MHz BW	MHz		
	2412	2437	2472
HT40MCS0/8	21	20	20
HT40MCS1/9	21	20	20
HT40MCS2/10	21	20	20
HT40MCS3/11	21	20	20
HT40MCS4/12	20	20	19
HT40MCS5/13	20	20	19
HT40MCS6/14	18	18	18
HT40MCS7/15	16	16	16

20MHz BW	MHz		
	5180	5320	5825
6Mbps	21	21	21
9Mbps	21	21	21
12Mbps	21	21	21
18Mbps	21	21	21
24Mbps	21	21	21
36Mbps	20	20	20
48Mbps	19	19	19
54Mbps	19	19	18
HT20MCS0/8	21	21	19
HT20MCS1/9	21	21	19
HT20MCS2/10	21	21	19
HT20MCS3/11	20	20	19
HT20MCS4/12	20	20	19
HT20MCS5/13	20	20	19
HT20MCS6/14	19	19	18
HT20MCS7/15	16	14	14

40MHz BW	MHz		
	5180	5320	5795
HT40MCS0/8	19	18	18
HT40MCS1/9	19	18	18
HT40MCS2/10	19	18	18
HT40MCS3/11	19	18	18
HT40MCS4/12	19	18	18
HT40MCS5/13	19	18	18
HT40MCS6/14	18	18	17
HT40MCS7/15	13	13	13

IV Sensitivity

(Two chains typical sensitivity level with +/- 3 dB tolerance, unit:dBm)

(Two chains typical sensitivity level with +/- 3 dB tolerance, unit:dBm)

20MHz BW	MHz		
	2412	2442	2472
1Mbps	-95	-95	-95
2Mbps	-95	-95	-95
5.5Mbps	-95	-95	-95
11Mbps	-92	-91	-90
6Mbps	-95	-95	-94
9Mbps	-94	-95	-95
12Mbps	-95	-94	-94
18Mbps	-93	-93	-93
24Mbps	-89	-90	-90
36Mbps	-86	-86	-87
48Mbps	-82	-83	-81
54Mbps	-81	-80	-80
HT20 MCS0	-95	-95	-95
HT20 MCS1	-94	-94	-94
HT20 MCS2	-92	-92	-92
HT20 MCS3	-89	-89	-88
HT20 MCS4	-86	-85	-85
HT20 MCS5	-81	-81	-80
HT20 MCS6	-80	-80	-78
HT20 MCS7	-78	-77	-77

40MHz BW	MHz		
	2412	2442	2472
HT40 MCS0	-90	-90	-91
HT40 MCS1	-90	-90	-91
HT40 MCS2	-88	-89	-89
HT40 MCS3	-85	-86	-86
HT40 MCS4	-83	-83	-83
HT40 MCS5	-78	-79	-78
HT40 MCS6	-77	-77	-78
HT40 MCS7	-75	-75	-74

20MHz BW	MHz		
	5180	5320	5825
6Mbps	-95	-95	-97
9Mbps	-94	-95	-97
12Mbps	-93	-94	-96
18Mbps	-91	-92	-94
24Mbps	-87	-88	-90
36Mbps	-84	-85	-87
48Mbps	-80	-81	-83
54Mbps	-79	-80	-80
HT20 MCS0	-94	-95	-97
HT20 MCS1	-92	-93	-94
HT20 MCS2	-90	-90	-92
HT20 MCS3	-86	-87	-89
HT20 MCS4	-83	-84	-86
HT20 MCS5	-80	-80	-82
HT20 MCS6	-78	-79	-80
HT20 MCS7	-76	-77	-78

40MHz BW	MHz		
	5180	5320	5795
HT40 MCS0	-91	-92	-93
HT40 MCS1	-89	-90	-91
HT40 MCS2	-87	-87	-89
HT40 MCS3	-84	-84	-86
HT40 MCS4	-81	-82	-82
HT40 MCS5	-77	-78	-79
HT40 MCS6	-76	-76	-77
HT40 MCS7	-73	-74	-75