

RT2500 USB E2PROM contents

Configuration 1 (Offset 18h)

b15	14	13	12	11	10	b9	b8	b7	b6	b5	b4	b3	b2	b1	b0
	10									1	5				
Reserved (must be 0)									SBSA	Reserved (must be 0)					

- b4 ~0: Reserved (must be 0)
- b5: InterDigital Smart Antenna (SBSA) Mode 0 – disable (default)
 - 1 enable

Country Region Code index(Offset 1Bh)

Default value = FFh, which means read from INF and registry, more flexible than reading from EEPROM, this is our current InstallShield CCS implementation.

CountryCode— Specify the domain code, can be FFh or one of the followings,

0: FCC, CH1-11 1: IC (Canada), CH1-11 2: ETSI, CH1-13 3: SPAIN, CH10-11 4: FRANCE, CH10-13 5: MKK, CH14 6: MKK1(TELEC), CH1-14 7: ISRAEL, CH3-9 (Obsolete 5-7)

BBP Instructions (Offset 1Ch ~ 3Bh, total 16 instructions)

16 spare BBP instructions are reserved in E2PROM; each instruction is a <BBP register ID, BBP register value> pair which instructs device driver to initialize the specified BBP register with the specified value upon NIC initialization.

BBP instructions with value <FF, FF> or <00,00> are considered invalid and will be ignored.

Channel 1-14 TX Power (Offset 3Ch ~ 49h)

To prevent reading from EMPTY E2PROM, driver treats these "Channel xx Tx Power" value 0 and any value >= 32 as invalid. That is, only bit [0..4] in each byte contains valid data, bit[5..7] MUST be 0. This TX power level is configured into RF R3 TX[0..4] bits. If a TX power value is invalid, driver will use hardcoded value 31 for this channel.

Tx Power delta TSSI Boundary (4Ah ~ 52h)

Driver compares current TSSI value (from BBP R1) with this TSSI reference value as a base to decide if real-time TX power compensation is required. 0xFF will be treated as invalid value. This function is controlled by 'TX AGC' bit in NIC configuration byte.

Tx ALC step value (53h)

Delta value for Tx Power step up/down auto-calibration.

Driver reads this value as delta value when doing real-time TX calibration. 0xFF will be treated as invalid value. This function controlled by 'TXAGC' bit in NIC configuration byte.

Number of Blocks in Flash (Offset FCh)