MT3620 E-fuse Content Guidelines

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Document Revision History

Revision	Date	Description
2.0	2020-04-13	• 1st Public Release
2.1	2020-07-28	• Update write owner and value type for TSSI related offset addresses in sec. 2. • Update descriptions for TSSI slope and offset in sec. 3.4. • Update value type for offset address 0x25, 0x3D to option.

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1 General Discretions

MT3620 E-fuse includes many values and settings to make HW performing correctly. There are 3 types of value assigned in E-fuse.

- Written in FT
- Defined in BIN
- Option

Written in FT

If the E-fuse values are defined as written in FT, the write owner is MTK and all values of this type would be written to E-fuse in MTK FT station. Users or customers shall NOT change any value of these.

Defined in BIN

Users or customers are responsible for writing values assigned as Defined in BIN and Option to E-fuse on production line. Values defined in BIN mean MTK would provide these values in eeprom.bin file to make HW performances and behavior met requests and specifications. MTK does NOT recommend users or customers change these values without any permission.

Option

The option values are used to configure HW performances or behavior according to users' or customers' specific requirements. Users can set these values on production line and write them to E-fuse.

This document is guidelines to introduce values assigned as option in E-fuse.

2 E-Fuse Layout

The E-Fuse contents shown in following table includes all offset addresses of 4 value types. All values listed in Hex Value column are for reference only. Users should refer to eeprom.bin file to have correct value of each address and configure value type of option properly to make HW working correctly.

Offset Address	Hex Value	Description	Write owner	Value Type
0x00	20	Chip ID	Customer	Defined in BIN
0x01	36		Customer	Defined in BIN
0x02	05	E-fuse Version	Customer	Defined in BIN
0x03	00		Customer	Defined in BIN
0x04	00	WLAN Mac Address [7:0]	Customer	Option
0x05	00	WLAN Mac Address [15:8]	Customer	Option
0x06	00	WLAN Mac Address [23:16]	Customer	Option
0x07	00	WLAN Mac Address [31:24]	Customer	Option
0x08	00	WLAN Mac Address [39:32]	Customer	Option
0x09	00	WLAN Mac Address [47:40]	Customer	Option
0x0A	00	Reserved	Customer	Defined in BIN
0x0B	00	Reserved	Customer	Defined in BIN
0x0C	00	Reserved	Customer	Defined in BIN
0x0D	00	Reserved	Customer	Defined in BIN
0x0E	00	Reserved	Customer	Defined in BIN
0x0F	00	Reserved	Customer	Defined in BIN
0x10	00	Reserved	Customer	Defined in BIN
0x11	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x12	00	Reserved	Customer	Defined in BIN
0x13	00	Reserved	Customer	Defined in BIN
0x14	00	Reserved	Customer	Defined in BIN
0x15	00	Reserved	Customer	Defined in BIN
0x16	00	Reserved	Customer	Defined in BIN
0x17	00	Reserved	Customer	Defined in BIN
0x18	00	Reserved	Customer	Defined in BIN
0x19	00	Reserved	Customer	Defined in BIN
0x1A	00	Reserved	Customer	Defined in BIN
0x1B	00	Reserved	Customer	Defined in BIN
0x1C	00	Reserved	Customer	Defined in BIN
0x1D	00	Reserved	Customer	Defined in BIN
0x1E	00	Reserved	Customer	Defined in BIN
0x1F	00	Reserved	Customer	Defined in BIN
0x20	00	2.4GHz Max TX Power Control	Customer	Option
0x21	00	5GHz Max TX Power Control	Customer	Option
0x22	00	Cfg0_opt	Customer	Defined in BIN
0x23	00		Customer	Defined in BIN
0x24	00	Reserved	Customer	Defined in BIN
0x25	00	Single/Dual Band selection	Customer	Option
0x26	00	Reserved	Customer	Defined in BIN
0x27	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x28	00	Reserved	Customer	Defined in BIN
0x29	00	Reserved	Customer	Defined in BIN
0x2A	00	Reserved	Customer	Defined in BIN
0x2B	00	Reserved	Customer	Defined in BIN
0x2C	00	Reserved	Customer	Defined in BIN
0x2D	00	Reserved	Customer	Defined in BIN
0x2E	00	Reserved	Customer	Defined in BIN
0x2F	00	Reserved	Customer	Defined in BIN
0x30	00	Reserved	Customer	Defined in BIN
0x31	00	Reserved	Customer	Defined in BIN
0x32	00	Reserved	Customer	Defined in BIN
0x33	00	Reserved	Customer	Defined in BIN
0x34	00	Reserved	Customer	Defined in BIN
0x35	00	Reserved	Customer	Defined in BIN
0x36	00	2 Letters CRDA Country code	Customer	Defined in BIN
0x37	00	2 Letters CRDA Country code	Customer	Defined in BIN
0x38	FF	Reserved	Customer	Option
0x39	FF	Reserved	Customer	Option
0x3A	20	TX BBP config, bit[1:0]: 00:FPA, 01:HPA, 10:MPA, 11:dynamic PA	Customer	Defined in BIN
0x3B	00	Reserved	Customer	Defined in BIN
0x3C	60	TSSI and Antenna Polarity control	Customer	Defined in BIN
0x3D	00	Antenna Diversity control	Customer	Option

Offset Address	Hex Value	Description	Write owner	Value Type
0x3E	CC	Co-RF / TDD-FDD / ePA / eLNA control	Customer	Defined in BIN
0x3F	00	Reserved	Customer	Defined in BIN
0x40	00	Reserved	Customer	Defined in BIN
0x41	00	Reserved	Customer	Defined in BIN
0x42	00	Reserved	Customer	Defined in BIN
0x43	00	Reserved	Customer	Defined in BIN
0x44	00	Reserved	Customer	Defined in BIN
0x45	00	Reserved	Customer	Defined in BIN
0x46	00	Reserved	Customer	Defined in BIN
0x47	00	Reserved	Customer	Defined in BIN
0x48	00	Reserved	Customer	Defined in BIN
0x49	00	Reserved	Customer	Defined in BIN
0x4A	00	Reserved	Customer	Defined in BIN
0x4B	00	Reserved	Customer	Defined in BIN
0x4C	00	Reserved	Customer	Defined in BIN
0x4D	00	Reserved	Customer	Defined in BIN
0x4E	00	Reserved	Customer	Defined in BIN
0x4F	00	Reserved	Customer	Defined in BIN
0x50	00	Reserved	Customer	Defined in BIN
0x51	00	2.4G RSSI0 offset	Customer	Defined in BIN
0x52	00	5G RSSI0 offset	Customer	Defined in BIN
0x53	33	THADC Analog part	MTK	Written in FT

Offset Address	Hex Value	Description	Write owner	Value Type
0x54	40	THADC slope	MTK	Written in FT
0x55	00	Temperature sensor calibration	MTK	Written in FT
0x56	40	TX0 2.4G PA TSSI slope	Customer	Defined in BIN
0x57	D0	TX0 2.4G PA TSSI offset	Customer	Defined in BIN
0x58	20	TX0 2.4G TX power (54Mbps, dBm absolute value)	Customer	Option
0x59	00	TX0 2.4G TX power offset low group (CH1~5) (delta, dB)	Customer	Option
0x5A	00	TX0 2.4G TX power offset middle group (CH6~10) (delta, dB)	Customer	Option
0x5B	00	TX0 2.4G TX power offset high group (CH11~14) (delta, dB)	Customer	Option
0x5C	00	Reserved	Customer	Defined in BIN
0x5D	00	Reserved	Customer	Defined in BIN
0x5E	00	Reserved	Customer	Defined in BIN
0x5F	00	Reserved	Customer	Defined in BIN
0x60	00	2G TX DPD Calibration	Customer	Defined in BIN
0x61	00	5G TX DPD Calibration	Customer	Defined in BIN
0x62	42	TX0 5G PA **TSSI slope Group0**: 4850 ~ 5140MHz (CH184, 188, 192, 196, 8, 12, 16)	Customer	Defined in BIN
0x63	CE	TX0 5G PA **TSSI offset Group0**: 4850 ~ 5140MHz (CH184, 188, 192, 196, 8, 12, 16)	Customer	Defined in BIN
0x64	1C	TX0 5G TX **power Group0:** 4850 ~ 5140MHz (54M,dBm, Abs-value) (CH184, 188, 192, 196, 8, 12, 16)	Customer	Option
0x65	00	TX0 5G TX power offset **low Group0**: 4850 ~ 4960MHz (delta, dB) (CH184, 188, 192)	Customer	Option
0x66	00	TX0 5G TX power offset **high Group0**: 4965 ~ 5140MHz (delta, dB) (CH196, 8, 12, 16)	Customer	Option
0x67	42	TX0 5G PA **TSSI slope Group1**: 5145 ~ 5250MHz (CH36, 40, 44, 48)	Customer	Defined in BIN
0x68	CE	TX0 5G PA **TSSI offset Group1**: 5145 ~ 5250MHz (CH36, 40, 44, 48)	Customer	Defined in BIN
0x69	1C	TX0 5G TX **power Group1**: 5145 ~ 5250MHz (54M,dBm, Abs-value) (CH36, 40, 44, 48)	Customer	Option

Offset Address	Hex Value	Description	Write owner	Value Type
0x6A	00	TX0 5G TX power offset **low Group1**: 5145 ~ 5200MHz (delta, dB) (CH36,40)	Customer	Option
0x6B	00	TX0 5G TX power offset **high Group1:** 5205 ~ 5250MHz (delta, dB) (CH44, 48)	Customer	Option
0x6C	42	TX0 5G PA **TSSI slope Group2:** 5255 ~ 5360MHz (CH52, 56, 60, 64)	Customer	Defined in BIN
0x6D	CD	TX0 5G PA **TSSI offset Group2**: 5255 ~ 5360MHz (CH52, 56, 60, 64)	Customer	Defined in BIN
0x6E	1C	TX0 5G TX **power Group2:** 5255 ~ 5360MHz (54M,dBm, Abs-value) CH52, 56, 60, 64)	Customer	Option
0x6F	00	TX0 5G TX power offset **low Group2**: 5255 ~ 5295MHz (delta, dB) (CH52, 56)	Customer	Option
0x70	00	TX0 5G TX power offset **high Group2**: 5300 ~ 5360MHz (delta, dB) (CH60, 64)	Customer	Option
0x71	C2	TX0 5G PA **TSSI slope Group3**: 5365 ~ 5470MHz (Reserved)	Customer	Defined in BIN
0x72	CD	TX0 5G PA **TSSI offset Group3**: 5365 ~ 5470MHz (Reserved)	Customer	Defined in BIN
0x73	1C	TX0 5G TX **power Group3**: 5365 ~ 5470MHz(54M,dBm, Abs-value) (Reserved)	Customer	Option
0x74	00	TX0 5G TX power offset **low Group3**: 5365 ~ 5415MHz (delta, dB) (Reserved)	Customer	Option
0x75	00	TX0 5G TX power offset **high Group3**: 5420 ~ 5470MHz (delta, dB) (Reserved)	Customer	Option
0x76	C2	TX0 5G PA **TSSI slope Group4:** 5475MHz ~ 5580MHz (CH100, 104, 108, 112, 116)	Customer	Defined in BIN
0x77	CC	TX0 5G PA **TSSI offset Group4**: 5475MHz ~ 5580MHz (CH100, 104, 108, 112, 116)	Customer	Defined in BIN
0x78	1C	TX0 5G TX **power Group4**: 5475MHz ~ 5580MHz (54M,dBm, Abs-value) (CH100, 104, 108, 112, 116)	Customer	Option
0x79	00	TX0 5G TX power offset **low Group4:** 5475 ~ 5535MHz (delta, dB) (CH100, 104)	Customer	Option
0x7A	00	TX0 5G TX power offset **high Group4:** 5540 ~ 5580MHz (delta, dB) (CH108, 112, 116)	Customer	Option
0x7B	C2	TX0 5G PA **TSSI slope Group5:** 5585 ~ 5690MHz (CH120, 124, 128, 132, 136)	Customer	Defined in BIN
0x7C	CB	TX0 5G PA **TSSI offset Group5**: 5585 ~ 5690MHz (CH120, 124, 128, 132, 136)	Customer	Defined in BIN
0x7D	1C	TX0 5G TX **power Group5:** 5585 ~ 5690MHz (54M,dBm, Abs-value) (CH120, 124, 128, 132, 136)	Customer	Option
0x7E	00	TX0 5G TX power offset **low Group5:** 5585 ~ 5635MHz (delta, dB) (CH120, 124)	Customer	Option
0x7F	00	TX0 5G TX power offset **high Group5:** 5640 ~ 5690MHz (delta, dB) (CH128, 132, 136)	Customer	Option

Offset Address	Hex Value	Description	Write owner	Value Type
0x80	C2	TX0 5G PA **TSSI slope Group6**: 5695 ~ 5805MHz (CH140, 144, 149, 153, 157, 161)	Customer	Defined in BIN
0x81	CC	TX0 5G PA **TSSI offset Group6:** 5695 ~ 5805MHz (CH140, 144, 149, 153, 157, 161)	Customer	Defined in BIN
0x82	1C	TX0 5G TX **power Group6:** 5695 ~ 5805MHz (54M,dBm, Abs-value) (CH140, 144, 149, 153, 157, 161)	Customer	Option
0x83	00	TX0 5G TX power offset **low Group6:** 5695 ~ 5740MHz (delta, dB) (CH140, 144)	Customer	Option
0x84	00	TX0 5G TX power offset **high Group6:** 5745 ~ 5805MHz (delta, dB) (CH149, 153, 157, 161)	Customer	Option
0x85	C2	TX0 5G PA **TSSI slope Group7:** 5810 ~ 5925MHz CH165	Customer	Defined in BIN
0x86	CC	TX0 5G PA **TSSI offset Group7:** 5810 ~ 5925MHz CH165	Customer	Defined in BIN
0x87	1C	TX0 5G TX **power Group7:** 5810 ~ 5925MHz (54M,dBm, Abs-value) CH165	Customer	Option
0x88	00	TX0 5G TX power offset **low Group7:** 5810 ~ 5820MHz (delta, dB)	Customer	Option
0x89	00	TX0 5G TX power offset **high Group7:** 5825 ~ 5925MHz (delta, dB) CH 165	Customer	Option
0x8A	00	2.4GHz TX power for CCK 1M/2M (delta, dB)	Customer	Option
0x8B	00	2.4GHz TX power for CCK 5.5M/11M (delta, dB)	Customer	Option
0x8C	00	2.4GHz TX power for OFDM 6M/9M(delta, dB)	Customer	Option
0x8D	00	2.4GHz TX power for OFDM 12M/18M(delta, dB)	Customer	Option
0x8E	00	2.4GHz TX power for OFDM 24M/36M(delta, dB)	Customer	Option
0x8F	00	2.4GHz TX power for OFDM 48M(delta, dB)	Customer	Option
0x90	00	2.4GHz TX power for OFDM 54M(delta, dB)	Customer	Option
0x91	00	2.4G TX power for HT20 MCS=0(delta, dB)	Customer	Option
0x92	00	Reserved	Customer	Defined in BIN
0x93	00	2.4G TX power for HT20 MCS=1,2(delta, dB)	Customer	Option
0x94	00	2.4G TX power for HT20 MCS=3,4(delta, dB)	Customer	Option
0x95	00	2.4G TX power for HT20 MCS=5(delta, dB)	Customer	Option

Offset Address	Hex Value	Description	Write owner	Value Type
0x96	00	2.4G TX power for HT20 MCS=6(delta, dB)	Customer	Option
0x97	00	2.4G TX power for HT20 MCS=7(delta, dB)	Customer	Option
0x98	00	Reserved	Customer	Defined in BIN
0x99	00	Reserved	Customer	Defined in BIN
0x9A	00	Reserved	Customer	Defined in BIN
0x9B	00	Reserved	Customer	Defined in BIN
0x9C	00	Reserved	Customer	Defined in BIN
0x9D	00	Reserved	Customer	Defined in BIN
0x9E	00	Reserved	Customer	Defined in BIN
0x9F	00	Reserved	Customer	Defined in BIN
0xA0	00	Reserved	Customer	Defined in BIN
0xA1	00	5GHz TX power for OFDM 6M/9M(delta, dB)	Customer	Option
0xA2	00	5GHz TX power for OFDM 12M/18M(delta, dB)	Customer	Option
0xA3	00	5GHz TX power for OFDM 24M/36M(delta, dB)	Customer	Option
0xA4	00	5GHz TX power for OFDM 48M(delta, dB)	Customer	Option
0xA5	00	5GHz TX power for OFDM 54M(delta, dB)	Customer	Option
0xA6	00	5G TX power for HT20 MCS=0(delta, dB)	Customer	Option
0xA7	00	Reserved	Customer	Defined in BIN
0xA8	00	5G TX power for HT20 MCS=1,2(delta, dB)	Customer	Option
0xA9	00	5G TX power for HT20 MCS=3,4(delta, dB)	Customer	Option
0xAA	00	5G TX power for HT20 MCS=5(delta, dB)	Customer	Option
0xAB	00	5G TX power for HT20 MCS=6(delta, dB)	Customer	Option

Offset Address	Hex Value	Description	Write owner	Value Type
0xAC	00	5G TX power for HT20 MCS=7(delta, dB)	Customer	Option
0xAD	00	Reserved	Customer	Defined in BIN
0xAE	00	Reserved	Customer	Defined in BIN
0xAF	00	Reserved	Customer	Defined in BIN
0xB0	00	Reserved	Customer	Defined in BIN
0xB1	00	Reserved	Customer	Defined in BIN
0xB2	00	Reserved	Customer	Defined in BIN
0xB3	00	Reserved	Customer	Defined in BIN
0xB4	00	Reserved	Customer	Defined in BIN
0xB5	00	Reserved	Customer	Defined in BIN
0xB6	00	Reserved	Customer	Defined in BIN
0xB7	00	Reserved	Customer	Defined in BIN
0xB8	00	Reserved	Customer	Defined in BIN
0xB9	00	Reserved	Customer	Defined in BIN
0xBA	00	Reserved	Customer	Defined in BIN
0xBB	00	Reserved	Customer	Defined in BIN
0xBC	00	Reserved	Customer	Defined in BIN
0xBD	00	Reserved	Customer	Defined in BIN
0xBE	00	Reserved	Customer	Defined in BIN
0xBF	00	Reserved	Customer	Defined in BIN
0xC0	00	Reserved	Customer	Defined in BIN
0xC1	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0xC2	00	Reserved	Customer	Defined in BIN
0xC3	00	Reserved	Customer	Defined in BIN
0xC4	00	Reserved	Customer	Defined in BIN
0xC5	00	Reserved	Customer	Defined in BIN
0xC6	00	Reserved	Customer	Defined in BIN
0xC7	00	Reserved	Customer	Defined in BIN
0xC8	00	Reserved	Customer	Defined in BIN
0xC9	00	Reserved	Customer	Defined in BIN
0xCA	00	Reserved	Customer	Defined in BIN
0xCB	00	Reserved	Customer	Defined in BIN
0xCC	00	Reserved	Customer	Defined in BIN
0xCD	00	Reserved	Customer	Defined in BIN
0xCE	00	Reserved	Customer	Defined in BIN
0xCF	00	Reserved	Customer	Defined in BIN
0xD0	00	Reserved	Customer	Defined in BIN
0xD1	00	Reserved	Customer	Defined in BIN
0xD2	00	Reserved	Customer	Defined in BIN
0xD3	00	Reserved	Customer	Defined in BIN
0xD4	00	Reserved	Customer	Defined in BIN
0xD5	00	Reserved	Customer	Defined in BIN
0xD6	00	Reserved	Customer	Defined in BIN
0xD7	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0xD8	00	Reserved	Customer	Defined in BIN
0xD9	00	Reserved	Customer	Defined in BIN
0xDA	00	Reserved	Customer	Defined in BIN
0xDB	00	Reserved	Customer	Defined in BIN
0xDC	00	Reserved	Customer	Defined in BIN
0xDD	00	Reserved	Customer	Defined in BIN
0xDE	00	Reserved	Customer	Defined in BIN
0xDF	00	Reserved	Customer	Defined in BIN
0xE0	00	Reserved	Customer	Defined in BIN
0xE1	00	Reserved	Customer	Defined in BIN
0xE2	00	Reserved	Customer	Defined in BIN
0xE3	00	Reserved	Customer	Defined in BIN
0xE4	00	Pre-set patch CR0 Address byte0	Customer	Defined in BIN
0xE5	00	Pre-set patch CR0 Address byte1	Customer	Defined in BIN
0xE6	00	Pre-set patch CR0 Address byte2	Customer	Defined in BIN
0xE7	00	Pre-set patch CR0 Address byte3	Customer	Defined in BIN
0xE8	00	Pre-set patch CR0 data byte0	Customer	Defined in BIN
0xE9	00	Pre-set patch CR0 data byte1	Customer	Defined in BIN
0xEA	00	Pre-set patch CR0 data byte2	Customer	Defined in BIN
0xEB	00	Pre-set patch CR0 data0 byte3	Customer	Defined in BIN
0xEC	00	Pre-set patch CR1 Address byte0	Customer	Defined in BIN
0xED	00	Pre-set patch CR1 Address byte1	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0xEE	00	Pre-set patch CR1 Address byte2	Customer	Defined in BIN
0xEF	00	Pre-set patch CR1 Address byte3	Customer	Defined in BIN
0xF0	00	Pre-set patch CR1 data byte0	Customer	Defined in BIN
0xF1	00	Pre-set patch CR1 data byte1	Customer	Defined in BIN
0xF2	00	Pre-set patch CR1 data byte2	Customer	Defined in BIN
0xF3	00	Pre-set patch CR1 data byte3	Customer	Defined in BIN
0xF4	00	Reserved	Customer	Option
0xF5	00	Reserved	Customer	Option
0xF6	00	Reserved	Customer	Defined in BIN
0xF7	00	WIFI Rcal result	MTK	Written in FT
0xF8	00	Reserved	Customer	Defined in BIN
0xF9	00	Reserved	Customer	Defined in BIN
0xFA	00	Reserved	Customer	Defined in BIN
0xFB	00	Reserved	Customer	Defined in BIN
0xFC	00	Reserved	Customer	Defined in BIN
0xFD	00	Reserved	Customer	Defined in BIN
0xFE	00	Reserved	Customer	Defined in BIN
0xFF	00	Reserved	Customer	Defined in BIN
0x100	00	CP_FT_Version	MTK	Written in FT
0x101	00	Reserved	Customer	Defined in BIN
0x102	00	Reserved	Customer	Defined in BIN
0x103	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x104	00	Reserved	Customer	Defined in BIN
0x105	00	Reserved	Customer	Defined in BIN
0x106	00	Reserved	Customer	Defined in BIN
0x107	00	Reserved	Customer	Defined in BIN
0x108	00	Reserved	Customer	Defined in BIN
0x109	00	Reserved	Customer	Defined in BIN
0x10A	00	Reserved	Customer	Defined in BIN
0x10B	00	Reserved	Customer	Defined in BIN
0x10C	00	Reserved	Customer	Defined in BIN
0x10D	00	Reserved	Customer	Defined in BIN
0x10E	00	Reserved	Customer	Defined in BIN
0x10F	00	Reserved	Customer	Defined in BIN
0x110	00	Reserved	Customer	Defined in BIN
0x111	00	Reserved	Customer	Defined in BIN
0x112	00	Reserved	Customer	Defined in BIN
0x113	00	Reserved	Customer	Defined in BIN
0x114	00	Reserved	Customer	Defined in BIN
0x115	00	Reserved	Customer	Defined in BIN
0x116	00	Reserved	Customer	Defined in BIN
0x117	00	Reserved	Customer	Defined in BIN
0x118	00	Reserved	Customer	Defined in BIN
0x119	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x11A	00	Reserved	Customer	Defined in BIN
0x11B	00	Reserved	Customer	Defined in BIN
0x11C	00	Reserved	Customer	Defined in BIN
0x11D	00	Reserved	Customer	Defined in BIN
0x11E	00	Reserved	Customer	Defined in BIN
0x11F	00	Reserved	Customer	Defined in BIN
0x120	00	Reserved	Customer	Defined in BIN
0x121	00	Reserved	Customer	Defined in BIN
0x122	00	Reserved	Customer	Defined in BIN
0x123	00	Reserved	Customer	Defined in BIN
0x124	00	Reserved	Customer	Defined in BIN
0x125	00	Reserved	Customer	Defined in BIN
0x126	00	Reserved	Customer	Defined in BIN
0x127	00	Reserved	Customer	Defined in BIN
0x128	00	Reserved	Customer	Defined in BIN
0x129	00	Reserved	Customer	Defined in BIN
0x12A	00	Reserved	Customer	Defined in BIN
0x12B	00	Reserved	Customer	Defined in BIN
0x12C	00	Reserved	Customer	Defined in BIN
0x12D	00	Reserved	Customer	Defined in BIN
0x12E	00	Reserved	Customer	Defined in BIN
0x12F	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x130	00	Reserved	Customer	Defined in BIN
0x131	00	Reserved	Customer	Defined in BIN
0x132	00	Reserved	Customer	Defined in BIN
0x133	00	Reserved	Customer	Defined in BIN
0x134	00	Reserved	Customer	Defined in BIN
0x135	00	Reserved	Customer	Defined in BIN
0x136	00	Reserved	Customer	Defined in BIN
0x137	00	Reserved	Customer	Defined in BIN
0x138	00	Reserved	Customer	Defined in BIN
0x139	00	Reserved	Customer	Defined in BIN
0x13A	00	Reserved	Customer	Defined in BIN
0x13B	00	Reserved	Customer	Defined in BIN
0x13C	00	Reserved	Customer	Defined in BIN
0x13D	00	Reserved	Customer	Defined in BIN
0x13E	00	Reserved	Customer	Defined in BIN
0x13F	00	Reserved	Customer	Defined in BIN
0x140	00	Reserved	Customer	Defined in BIN
0x141	00	Reserved	Customer	Defined in BIN
0x142	00	Reserved	Customer	Defined in BIN
0x143	00	Reserved	Customer	Defined in BIN
0x145	00	Reserved	Customer	Defined in BIN
0x146	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x147	00	Reserved	Customer	Defined in BIN
0x148	00	Reserved	Customer	Defined in BIN
0x149	00	Reserved	Customer	Defined in BIN
0x14A	00	Reserved	Customer	Defined in BIN
0x14B	00	Reserved	Customer	Defined in BIN
0x14C	00	Reserved	Customer	Defined in BIN
0x14D	00	Reserved	Customer	Defined in BIN
0x14E	00	Reserved	Customer	Defined in BIN
0x14F	00	Reserved	Customer	Defined in BIN
0x150	00	Reserved	Customer	Defined in BIN
0x151	00	Reserved	Customer	Defined in BIN
0x152	00	Reserved	Customer	Defined in BIN
0x153	00	Reserved	Customer	Defined in BIN
0x154	00	Reserved	Customer	Defined in BIN
0x155	00	Reserved	Customer	Defined in BIN
0x156	00	Reserved	Customer	Defined in BIN
0x157	00	Reserved	Customer	Defined in BIN
0x158	00	Reserved	Customer	Defined in BIN
0x159	00	Reserved	Customer	Defined in BIN
0x15A	00	Reserved	Customer	Defined in BIN
0x15B	00	Reserved	Customer	Defined in BIN
0x15C	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x15D	00	Reserved	Customer	Defined in BIN
0x15E	00	Reserved	Customer	Defined in BIN
0x15F	00	Reserved	Customer	Defined in BIN
0x160	00	Reserved	Customer	Defined in BIN
0x161	00	Reserved	Customer	Defined in BIN
0x162	00	Reserved	Customer	Defined in BIN
0x163	00	Reserved	Customer	Defined in BIN
0x164	00	Reserved	Customer	Defined in BIN
0x165	00	Reserved	Customer	Defined in BIN
0x166	00	Reserved	Customer	Defined in BIN
0x167	00	Reserved	Customer	Defined in BIN
0x168	00	Reserved	Customer	Defined in BIN
0x169	00	Reserved	Customer	Defined in BIN
0x16A	00	Reserved	Customer	Defined in BIN
0x16B	00	Reserved	Customer	Defined in BIN
0x16C	00	Reserved	Customer	Defined in BIN
0x16D	00	Reserved	Customer	Defined in BIN
0x16E	00	Reserved	Customer	Defined in BIN
0x16F	00	Reserved	Customer	Defined in BIN
0x170	00	Reserved	Customer	Defined in BIN
0x171	00	Reserved	Customer	Defined in BIN
0x172	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x173	00	Reserved	Customer	Defined in BIN
0x174	00	Reserved	Customer	Defined in BIN
0x175	00	Reserved	Customer	Defined in BIN
0x176	00	Reserved	Customer	Defined in BIN
0x177	00	Reserved	Customer	Defined in BIN
0x178	00	Reserved	Customer	Defined in BIN
0x179	00	Reserved	Customer	Defined in BIN
0x17A	00	Reserved	Customer	Defined in BIN
0x17B	00	Reserved	Customer	Defined in BIN
0x17C	00	Reserved	Customer	Defined in BIN
0x17D	00	Reserved	Customer	Defined in BIN
0x17E	00	Reserved	Customer	Defined in BIN
0x17F	00	Reserved	Customer	Defined in BIN
0x180	00	Reserved	Customer	Defined in BIN
0x181	00	Reserved	Customer	Defined in BIN
0x182	00	(WIFI RF reserved)	Customer	Defined in BIN
0x183	00	(WIFI RF reserved)	Customer	Defined in BIN
0x184	00	(WIFI RF reserved)	Customer	Defined in BIN
0x185	00	(WIFI RF reserved)	Customer	Defined in BIN
0x186	00	(WIFI RF reserved)	Customer	Defined in BIN
0x187	00	Reserved	Customer	Defined in BIN
0x188	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x189	00	Reserved	Customer	Defined in BIN
0x18A	00	Reserved	Customer	Defined in BIN
0x18B	00	Reserved	Customer	Defined in BIN
0x18C	00	Reserved	Customer	Defined in BIN
0x18D	00	Reserved	Customer	Defined in BIN
0x18E	00	Reserved	Customer	Defined in BIN
0x18F	00	Reserved	Customer	Defined in BIN
0x190	00	Reserved	Customer	Defined in BIN
0x191	00	Reserved	Customer	Defined in BIN
0x192	00	Reserved	Customer	Defined in BIN
0x193	00	Reserved	Customer	Defined in BIN
0x194	00	Reserved	Customer	Defined in BIN
0x195	00	Reserved	Customer	Defined in BIN
0x196	00	Reserved	Customer	Defined in BIN
0x197	00	Reserved	Customer	Defined in BIN
0x198	00	Reserved	Customer	Defined in BIN
0x199	00	Reserved	Customer	Defined in BIN
0x19A	00	Reserved	Customer	Defined in BIN
0x19B	00	Reserved	Customer	Defined in BIN
0x19C	00	Reserved	Customer	Defined in BIN
0x19D	00	Reserved	Customer	Defined in BIN
0x19E	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x19F	00	Reserved	Customer	Defined in BIN
0x1A0	00	Reserved	Customer	Defined in BIN
0x1A1	00	Reserved	Customer	Defined in BIN
0x1A2	00	Reserved	Customer	Defined in BIN
0x1A3	00	Reserved	Customer	Defined in BIN
0x1A4	00	Reserved	Customer	Defined in BIN
0x1A5	00	Reserved	Customer	Defined in BIN
0x1A6	00	Reserved	Customer	Defined in BIN
0x1A7	00	Reserved	Customer	Defined in BIN
0x1A8	00	Reserved	Customer	Defined in BIN
0x1A9	00	Reserved	Customer	Defined in BIN
0x1AA	00	Reserved	Customer	Defined in BIN
0x1AB	00	Reserved	Customer	Defined in BIN
0x1AC	00	Reserved	Customer	Defined in BIN
0x1AD	00	Reserved	Customer	Defined in BIN
0x1AE	00	Reserved	Customer	Defined in BIN
0x1AF	00	Reserved	Customer	Defined in BIN
0x1B0	00	Reserved	Customer	Defined in BIN
0x1B1	00	Reserved	Customer	Defined in BIN
0x1B2	00	Reserved	Customer	Defined in BIN
0x1B3	00	Reserved	Customer	Defined in BIN
0x1B4	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x1B5	00	Reserved	Customer	Defined in BIN
0x1B6	00	Reserved	Customer	Defined in BIN
0x1B7	00	Reserved	Customer	Defined in BIN
0x1B8	00	Reserved	Customer	Defined in BIN
0x1B9	00	Reserved	Customer	Defined in BIN
0x1BA	00	Reserved	Customer	Defined in BIN
0x1BB	00	Reserved	Customer	Defined in BIN
0x1BC	00	Reserved	Customer	Defined in BIN
0x1BD	00	Reserved	Customer	Defined in BIN
0x1BE	00	Reserved	Customer	Defined in BIN
0x1BF	00	Reserved	Customer	Defined in BIN
0x1C0	00	Reserved	Customer	Defined in BIN
0x1C1	00	Reserved	Customer	Defined in BIN
0x1C2	00	Reserved	Customer	Defined in BIN
0x1C3	00	Reserved	Customer	Defined in BIN
0x1C4	00	Reserved	Customer	Defined in BIN
0x1C5	00	Reserved	Customer	Defined in BIN
0x1C6	00	Reserved	Customer	Defined in BIN
0x1C7	00	Reserved	Customer	Defined in BIN
0x1C8	00	Reserved	Customer	Defined in BIN
0x1C9	00	Reserved	Customer	Defined in BIN
0x1CA	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x1CB	00	Reserved	Customer	Defined in BIN
0x1CC	00	Reserved	Customer	Defined in BIN
0x1CD	00	Reserved	Customer	Defined in BIN
0x1CE	00	Reserved	Customer	Defined in BIN
0x1CF	00	Reserved	Customer	Defined in BIN
0x1D0	00	Reserved	Customer	Defined in BIN
0x1D1	00	Reserved	Customer	Defined in BIN
0x1D2	00	Reserved	Customer	Defined in BIN
0x1D3	00	Reserved	Customer	Defined in BIN
0x1D4	00	Reserved	Customer	Defined in BIN
0x1D5	00	Reserved	Customer	Defined in BIN
0x1D6	00	Reserved	Customer	Defined in BIN
0x1D7	00	Reserved	Customer	Defined in BIN
0x1D8	00	Reserved	Customer	Defined in BIN
0x1D9	00	Reserved	Customer	Defined in BIN
0x1DA	00	Reserved	Customer	Defined in BIN
0x1DB	00	Reserved	Customer	Defined in BIN
0x1DC	00	Reserved	Customer	Defined in BIN
0x1DD	00	Reserved	Customer	Defined in BIN
0x1DE	00	Reserved	Customer	Defined in BIN
0x1DF	00	Reserved	Customer	Defined in BIN
0x1E0	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x1E1	00	Reserved	Customer	Defined in BIN
0x1E2	00	Reserved	Customer	Defined in BIN
0x1E3	00	Reserved	Customer	Defined in BIN
0x1E4	00	Reserved	Customer	Defined in BIN
0x1E5	00	Reserved	Customer	Defined in BIN
0x1E6	00	Reserved	Customer	Defined in BIN
0x1E7	00	Reserved	Customer	Defined in BIN
0x1E8	00	Reserved	Customer	Defined in BIN
0x1E9	00	Reserved	Customer	Defined in BIN
0x1EA	00	Reserved	Customer	Defined in BIN
0x1EB	00	Reserved	Customer	Defined in BIN
0x1EC	00	Reserved	Customer	Defined in BIN
0x1ED	00	Reserved	Customer	Defined in BIN
0x1EE	00	Reserved	Customer	Defined in BIN
0x1EF	00	Reserved	Customer	Defined in BIN
0x1F0	00	Reserved	Customer	Defined in BIN
0x1F1	00	Reserved	Customer	Defined in BIN
0x1F2	00	Reserved	Customer	Defined in BIN
0x1F3	00	Reserved	Customer	Defined in BIN
0x1F4	00	Reserved	Customer	Defined in BIN
0x1F5	00	Reserved	Customer	Defined in BIN
0x1F6	00	Reserved	Customer	Defined in BIN

Offset Address	Hex Value	Description	Write owner	Value Type
0x1F7	00	Reserved	Customer	Defined in BIN
0x1F8	00	Reserved	Customer	Defined in BIN
0x1F9	00	Reserved	Customer	Defined in BIN
0x1FA	00	Reserved	Customer	Defined in BIN
0x1FB	00	Reserved	Customer	Defined in BIN
0x1FC	00	Reserved	Customer	Defined in BIN
0x1FD	00	Reserved	Customer	Defined in BIN
0x1FE	00	Reserved	Customer	Defined in BIN
0x1FF	00	Reserved	Customer	Defined in BIN

3 Guidelines for Option Value Type

This chapter introduces all E-fuse offset addresses which write owner and value type are defined as customer and option respectively. MTK strongly recommends users or customers consult your contact window of MTK to know effects upon your changes of any option value type.

3.1 MAC Address

3.1.1 WLAN MAC Address (addr_0x04h ~ 0x09h)

If Wi-Fi MAC address is MAC: 00-99-87-65-43-21, the content value of EEPROM.bin should be as following table.

Offset Address	Hex Value	Description	Write owner	Value Type
0x04	00	WLAN Mac Address [7:0]	Customer	Option
0x05	99	WLAN Mac Address [15:8]	Customer	Option
0x06	87	WLAN Mac Address [23:16]	Customer	Option
0x07	65	WLAN Mac Address [31:24]	Customer	Option
0x08	43	WLAN Mac Address [39:32]	Customer	Option
0x09	21	WLAN Mac Address [47:40]	Customer	Option

3.2 Single/Dual Band selection (addr_0x25h)

Address 0x25h is used for single/dual band control as below,

Offset	Field	Description
0x25	3:0	Reserved
	5:4	Operation band control 00: Support 2.4G/5GHz dual band 01: Support 2.4GHz single band only 10: Support 5 GHz single band only
	7:6	Reserved

3.3 Antenna Diversity Control (addr_0x3Dh)

Address 0x3Dh is used for antenna diversity control and for TX/RX diversity, this needs an external DPDT hardware.

Offset	Field	Description
0x3D	0	0: Without DPDT Component 1: With DPDT Component
	1	Reserved
	3:2	Diversity control for 2.4G band 0: Fixed at Main antenna 1: Fixed at Aux antenna 2: Enable Rx diversity 3: Enable Tx & Rx diversity (need DPDT) Option 1~3 is for WiFi STA-only mode.
	5:4	Diversity control for 5G band 0: Fixed at Main antenna 1: Fixed at Aux antenna 2: Enable Rx diversity 3: Enable Tx & Rx diversity (need DPDT) Option 1~3 is for WiFi STA-only mode.
	7:6	Reserved

3.4 TX Power Control (addr_0x58h ~ 0x89h)

TX power control is using an internal close-loop mechanism named TSSI to control power level. TSSI slope and offset values are provided by Mediatek and the users make sure the values written in either buffer bin memory or Efuse matched the values defined in Bin file or in the table in sec. 2. Then users just need to assign a value as the target power level for each channel group in 2.4GHz and 5GHz bands.

3.4.1 2.4GHz TX Power Compensation

The value stored at addr_0x58 is an absolute value presenting the target power level of 2.4GHz OFDM-54M data rate. This value is very important since all data rates of 2.4GHz are referring to this value to have higher or lower power level.

One real PCBA design, TX power crossing the entire frequency band could not be ideal flatness due to variations from external components and PCB circuits. E-fuse addr_0x59 ~ addr_ 0x5B are used to compensate TX power 2.4GHz band to reach flatter power response.

Offset Address	Hex Value	Description	Write owner	Value Type
0x58	0A	TX0 2.4G TX power (54Mbps, dBm absolute value)	Customer	Option
0x59	00	TX0 2.4G TX power offset low group (CH1~5) (delta, dB)	Customer	Option
0x5A	00	TX0 2.4G TX power offset middle group (CH6~10) (delta, dB)	Customer	Option
0x5B	00	TX0 2.4G TX power offset high group (CH11~14) (delta, dB)	Customer	Option

Offset	Field	Description
58h	7:0	Target power level (absolute value) of OFDM-54M in dBm Unit: 0.5dB per step

- **Example**

  If Addr_0x58 = 0x0A, the target power level of TX0 2.4GHz OFDM-54Mbps is 10 x 0.5 = 5.0dBm.

Offset	Field	Description
59h 5Ah 5Bh	5:0	Power delta related to origin target power Unit : 0.5dB per step
	6	Increase/decrease bit 0 : decrease power 1: Increase power
	7	Enable bit 0 :disable 1: enable

- **Example**

  If target power = 5.0dBm (addr_0x58 = 0x0A) and measured TX power on 2.4GHz are

  - CH1: 4.5dBm
  - CH7: 5.0dBm
  - CH13: 6.0dBm

  User can set addr_0x59 ~ 0x5B as following values to have flatter power response on 2.4GHz band if target power level = 5dBm.

  - 5 – 4.5 = 0.5 ➔ Low group increases 0.5dB ➔ addr_0x59 = 0xC1
  - 5 – 5 = 0 ➔ Mid group has no change ➔ addr_0x5A = 0x00
  - 5 – 6 = -1 ➔ High group decreases 1dB ➔ addr_0x5B = 0x82

3.4.2 5GHz TX Power Control

E-fuse offset addresses listed in following table are used to set the target power level and do channel compensation of each channel group of 5GHz band. Users can refer to usages in section 3.3.1 for these offset addresses for 5GHz band.

Offset Address	Hex Value	Description	Write owner	Value Type
0x64	0A	TX0 5G TX **power Group0:** 4850 ~ 5140MHz (54M,dBm, Abs-value) (CH184, 188, 192, 196, 8, 12, 16)	Customer	Option
0x65	0	TX0 5G TX power offset **low Group0**: 4850 ~ 4960MHz (delta, dB) (CH184, 188, 192)	Customer	Option
0x66	0	TX0 5G TX power offset **high Group0**: 4965 ~ 5140MHz (delta, dB) (CH196, 8, 12, 16)	Customer	Option
0x69	0A	TX0 5G TX **power Group1**: 5145 ~ 5250MHz (54M,dBm, Abs-value) (CH36, 40, 44, 48)	Customer	Option
0x6A	0	TX0 5G TX power offset **low Group1**: 5145 ~ 5200MHz (delta, dB) (CH36,40)	Customer	Option
0x6B	0	TX0 5G TX power offset **high Group1:** 5205 ~ 5250MHz (delta, dB) (CH44, 48)	Customer	Option
0x6E	0A	TX0 5G TX **power Group2:** 5255 ~ 5360MHz (54M,dBm, Abs-value) CH52, 56, 60, 64)	Customer	Option
0x6F	0	TX0 5G TX power offset **low Group2**: 5255 ~ 5295MHz (delta, dB) (CH52, 56)	Customer	Option
0x70	0	TX0 5G TX power offset **high Group2**: 5300 ~ 5360MHz (delta, dB) (CH60, 64)	Customer	Option
0x73	0A	TX0 5G TX **power Group3**: 5365 ~ 5470MHz(54M,dBm, Abs-value) (Reserved)	Customer	Option
0x74	0	TX0 5G TX power offset **low Group3**: 5365 ~ 5415MHz (delta, dB) (Reserved)	Customer	Option
0x75	0	TX0 5G TX power offset **high Group3**: 5420 ~ 5470MHz (delta, dB) (Reserved)	Customer	Option
0x78	0A	TX0 5G TX **power Group4**: 5475 ~ 5580MHz (54M,dBm, Abs-value) (CH100, 104, 108, 112, 116)	Customer	Option
0x79	0	TX0 5G TX power offset **low Group4:** 5475 ~ 5535MHz (delta, dB) (CH100, 104)	Customer	Option
0x7A	0	TX0 5G TX power offset **high Group4:** 5540 ~ 5580MHz (delta, dB) (CH108, 112, 116)	Customer	Option
0x7D	0A	TX0 5G TX **power Group5:** 5585 ~ 5690MHz (54M,dBm, Abs-value) (CH120, 124, 128, 132, 136)	Customer	Option
0x7E	0	TX0 5G TX power offset **low Group5:** 5585 ~ 5635MHz (delta, dB) (CH120, 124)	Customer	Option
0x7F	0	TX0 5G TX power offset **high Group5:** 5640 ~ 5690MHz (delta, dB) (CH128, 132, 136)	Customer	Option
0x82	0A	TX0 5G TX **power Group6:** 5695 ~ 5805MHz (54M,dBm, Abs-value) (CH140, 144, 149, 153, 157, 161)	Customer	Option
0x83	0	TX0 5G TX power offset **low Group6:** 5695 ~ 5740MHz (delta, dB) (CH140, 144)	Customer	Option
0x84	0	TX0 5G TX power offset **high Group6:** 5745 ~ 5805MHz (delta, dB) (CH149, 153, 157, 161)	Customer	Option

Offset Address	Hex Value	Description	Write owner	Value Type
0x87	0A	TX0 5G TX **power Group7**: 5810 ~ 5925MHz (54M,dBm, Abs-value) CH165	Customer	Option
0x88	00	TX0 5G TX power offset low Group7: 5810 ~ 5820MHz (delta, dB)	Customer	Option
0x89	00	TX0 5G TX power offset high Group7: 5825 ~ 5925MHz (delta, dB) CH 165	Customer	Option

Offset	Field	Description
64h 69h … 82h 87h	7:0	Target power level (absolute value) of OFDM-54Mbps in dBm Unit: 0.5dB per step

Offset	Field	Description
65h / 66h 69h / 6Ah … 88h / 89h	5:0	Power delta related to origin target power Unit : 0.5dB per step
	6	Increase/decrease bit 0 : decrease power 1: Increase power
	7	Enable bit 0 :disable 1: enable

3.5 Power Delta for Modulation Rates (addr_0x8Ah ~ 0xACh)

3.5.1 Power Delta of 2.4GH Band

The power delta of each rate of 2.4GHz refers to E-fuse offset addr_0x58 to have delta of TX power in dB unit. Customers can set different power level for data rates according to specific RF power requirement

Offset Address	Hex Value	Description	Write owner	Value Type
0x8A	00	2.4GHz TX power for CCK 1M/2M(delta, dB)	Customer	Option
0x8B	00	2.4GHz TX power for CCK 5.5M/11M(delta, dB)	Customer	Option
0x8C	00	2.4GHz TX power for OFDM 6M/9M(delta, dB)	Customer	Option
0x8D	00	2.4GHz TX power for OFDM 12M/18M(delta, dB)	Customer	Option
0x8E	00	2.4GHz TX power for OFDM 24M/36M(delta, dB)	Customer	Option
0x8F	00	2.4GHz TX power for OFDM 48M(delta, dB)	Customer	Option
0x90	00	2.4GHz TX power for OFDM 54M(delta, dB)	Customer	Option
0x91	00	2.4G TX power for HT20 MCS=0(delta, dB)	Customer	Option
0x93	00	2.4G TX power for HT20 MCS=1,2(delta, dB)	Customer	Option
0x94	00	2.4G TX power for HT20 MCS=3,4(delta, dB)	Customer	Option
0x95	00	2.4G TX power for HT20 MCS=5(delta, dB)	Customer	Option
0x96	00	2.4G TX power for HT20 MCS=6(delta, dB)	Customer	Option
0x97	00	2.4G TX power for HT20 MCS=7(delta, dB)	Customer	Option

Offset	Field	Description
8Ah 8Bh … 96h 97h	5:0	Tx per-rate power setting Unit: 0.5dB per step.
	6	Increase/decrease bit 0 : decrease 1: Increase
	7	Enable bit 0 :disable 1: enable

- **Example:**
  addr_0x8C = 0xC4 ➔ 2.4GHz TX power of OFDM 6/9M is 2dB higher than OFDM-54M
  addr_0x8D = 0xC6 ➔ 2.4GHz TX power of OFDM 12/18M is 3dB higher than OFDM-54M
  addr_0x90 = 0x00 ➔ this value should be 0x00

addr_0x96 = 0x00 ➔ 2.4GHz TX power of HT MCS=6 is equal to OFDM-54M

addr_0x97 = 0x82 ➔ 2.4GHz TX power of HT MCS=7 is 1dB lower than OFDM-54M

3.5.2 Power Delta of 5GHz Band

The table shown below is 5GHz power delta of each rate which is also referring to E-fuse offset addr_0xA5 to have delta value. The usages of these addresses are similar to section 3.4.1.

Offset Address	Hex Value	Description	Write owner	Value Type
0xA1	0	5GHz TX power for OFDM 6M/9M(delta, dB)	Customer	Option
0xA2	0	5GHz TX power for OFDM 12M/18M(delta, dB)	Customer	Option
0xA3	0	5GHz TX power for OFDM 24M/36M(delta, dB)	Customer	Option
0xA4	0	5GHz TX power for OFDM 48M(delta, dB)	Customer	Option
0xA5	0	5GHz TX power for OFDM 54M(delta, dB)	Customer	Option
0xA6	0	5G TX power for HT20 MCS=0(delta, dB)	Customer	Option
0xA8	0	5G TX power for HT20 MCS=1,2(delta, dB)	Customer	Option
0xA9	0	5G TX power for HT20 MCS=3,4(delta, dB)	Customer	Option
0xAA	0	5G TX power for HT20 MCS=5(delta, dB)	Customer	Option
0xAB	0	5G TX power for HT20 MCS=6(delta, dB)	Customer	Option
0xAC	0	5G TX power for HT20 MCS=7(delta, dB)	Customer	Option

Offset	Field	Description
A1h A2h … ABh ACh	5:0	Tx per-rate power setting Unit: 0.5dB per step.
	6	Increase/decrease bit 0 : decrease 1: Increase
	7	Enable bit 0 :disable 1: enable

3.6 Maximum Power Control (addr_0x20h ~ 0x21h)

The table shown below is 2.4GHz and 5GHz maximum power control.

Offset Address	Hex Value	Description	Write owner	Value Type
0x20	0	2.4GHz Max TX Power Control	Customer	Option
0x21	0	5GHz Max TX Power Control	Customer	Option

Offset	Field	Description
0x20h 0x21h	4:0	Max. power limit value. 0.5dB per step.
	6:5	Reserved
	7	Control bit 1: Enable Max Power Control function 0: Disable Max Power Control function

- **Example**

  If Addr_0x21 = 0x90, Bit[4:0] = 10000b = 16d

  The maximum power level in 5G band is limited at 16 x 0.5 = 8.0dBm.