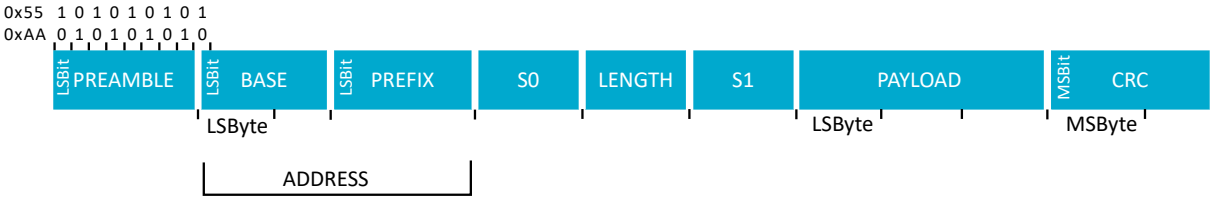

Figure 109: On-air packet layout

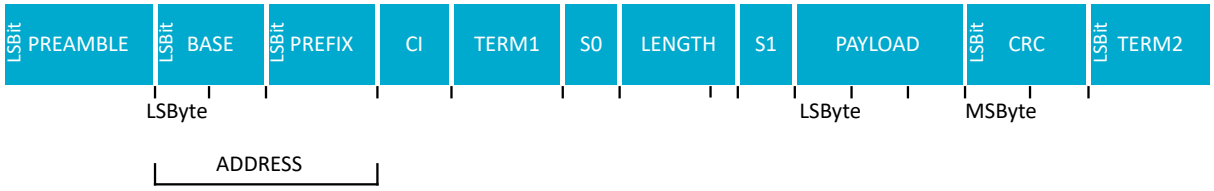

Figure 110: On-air packet layout for Long Range (125 kbps and 500 kbps) Bluetooth Low Energy modes

Not shown in the figures is the static payload add-on (the length of which is defined in PCNF1.STATLEN, and which is 0 bytes in a standard BLE packet). The static payload add-on is sent between PAYLOAD and CRC fields. RADIO sends the different fields in the packet in the order they are illustrated above, from left to right.

PREAMBLE is sent with least significant bit first on air. The size of the PREAMBLE depends on the mode selected in the MODE register.

		Preamble	
MODE	**PCNF0.PLEN**	**When first bit of ADDRESS is 0**	**When first bit of ADDRESS is 1**
Ble_1Mbit	1	0xAA	0x55
Nrf_1Mbit	1	0xAA	0x55
Nrf_2Mbit	1	0xAA	0x55
Ble_2Mbit	2	0xAAAA	0x5555
Nrf_4Mbit_0BT4	2	0xAAAA	0x5555
Nrf_4Mbit_0BT6	2	0xAAAA	0x5555
Ble_LR125Kbit	Any	10 repetitions of 0x3C	
Ble_LR500Kbit	Any	10 repetitions of 0x3C	
Ieee802154_250Kbit	Any	4 repetitions of 0x00	

Table 53: Preamble size according to mode

Radio packets are stored in memory inside instances of a RADIO packet data structure as shown in the following figure. The PREAMBLE, ADDRESS, CI, TERM1, TERM2, and CRC fields are omitted in this data structure. Fields S0, LENGTH, and S1 are optional.

Figure 111: Representation of a RADIO packet in RAM