

Bluebird Soft Inc.

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DECLARATION FOR ADDITIONAL FREQUENCY HOPPING REQUIREMENTS

To whom it may concern:

We hereby declare that the Bluetooth of **SS41SCMT** meet following FCC requirements of the Section 15.247(a)(1):

- 1. The hopping sequence is pseudorandom.
- 2. All channels are used equally on average.
- 3. The receiver input bandwidth approximately equal the transmit bandwidth.
- 4. The receiver hop in sequence with the transmit signal.

Attestation for hopping requirements

Section 15.247 (a)

The EUT contains a transmitter that modulates a carrier with data, changes carrier frequency in a pseudo-random pattern with a dwell time, channel separation, and hop count that meets the requirements of 15.247. In addition, the receiver tracks the transmitter's pseudo-random hopping sequence and demodulates the signal. The order of channels in the hop sequence is pseudo random list. Frequency-hopping proceeds in order through the list.

Equal Hopping Frequency Use [Section 15.247 (g)]

Each Frequency is specified only once in the list and the list is completed before looping back to the beginning.

Section 15.247 (h)

Since the device is programmed to follow a set hopping sequence, regardless of potential interference and it is not programmed to scan the channels for interference, it does not have the ability to coordinate with other FHSS systems in an effort to avoid the simultaneous occupancy of individual frequencies.

Pseudorandom frequency generator for frequency hopping

In the firmware code is inserted an array of 79 elements (named RF_channel) corresponding to 79 frequencies: the first frequency is 2402MHz and the others are

Fi = 2402 + i*1MHz where i is the index of the array ($0 \le i \le 78$)

Example of the hopping channels

[43] [1] [2] [27] [49] [22] [13] [39] [32] [21] [41] [45] [78] [47] [5] [46] [13] [15] [36] [21] [11] [4] [49] [17] [4] [11] [16] [33] [42] [47] [1] [12] [3] [39] [0] [49] [39] [4] [21] [17] [44] [10] [11] [25] [6] [7] [3] [0] [39] [13] [28] [39] [13] [22] [39] [45] [23] [44] [9] [7] [8] [11] [28] [49] [13] [4] [39] [17] [77] [51] [44] [32] [13] [6] [65] [45] [48] [54] [15] [48] [2] [15] [30] [2] [43] [31] [3] [10] [4] [56] [15] [40] [35] [20] [4] [2] [39] [19] [39] [24] [55] [24] [36] [32] [12] [27] [14] [21] [1] [5] [3] [18] [23] [38] [8] [19] [11] [25] [7] [27] [0] [36] [43] [42] [60] [32] [0] [9] [35] [13] [59] [5] [34] [37] [46] [32] [7] [33] [12] [24] [20] [31] [44] [39] [41] [28] [48] [43] [21] [0] [43] [0] [73] [13] [9] [17] [14] [0] [13] [38] [22] [31] [40] [45] [8] [0] [41] [38] [49] [32] [26] [15] [37] [50] [3] [0] [26] [43] [17] [35] [44] [4] [49] [17] [43] [63] [44] [23] [44] [15] [43] [41] [2] [19] [48] [8] [10] [39] [72] [21] [4] [10] [19] [7] [6] [43] [8] [10] [43] [7] [74] [13] [0] [22] [17] [39] [34] [27] [35] [18] [10] [16] [25] [32] [35] [28] [22] [0] [17] [4] [17] [37] [26] [3] [17] [27] [45] [66] [0] [17] [39] [35] [32] [22] [15] [38] [20] [23] [67] [13] [22] [4] [4] [39] [32] [49] [32] [0] [22] [21] [31] [11] [12] [26] [7] [17] [21] [56] [4] [22] [39] [39] [7] [35] [0] [23] [12] [14] [40] [13] [18] [39] [8] [32] [70] [49] [8] [45] [14] [28] [1] [35] [29] [13] [10] [22] [49] [39] [11] [35] [28] [21] [35] [39] [35] [72] [5] [34] [37] [70] [41] [24] [19] [24] [9] [23] [15] [42] [15] [2] [36] [33] [17] [65] [17] [48] [28] [11] [35] [30] [78] [51] [75] [61] [68] [51] [54] [66] [62] [64] [60] [73] [76]

Sincerely,

Joo-Hyung Lee Director