Software limitations related to STEVAL-BCNKT01V1 lot 1720
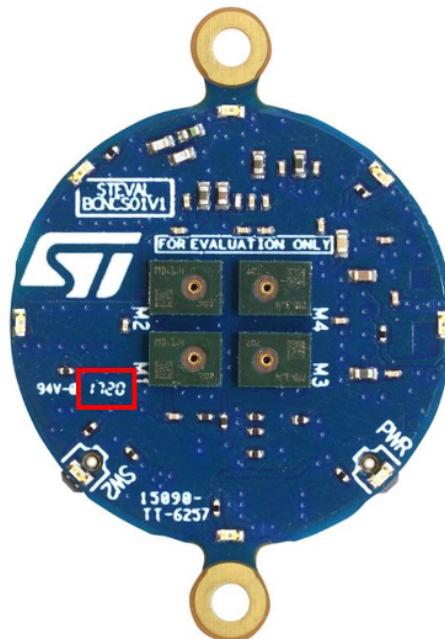
Board identification

This errata sheet applies to the STEVAL-BCNKT01V1 lot 1720 when using FP-AUD-SMARTMIC1 (v1.2.0 or above).

See the information below for details.

Table 1. Board summary

Order code	Device info
STEVAL-BCNKT01V1	1720 (on the STEVAL-BCNCS01V1 evaluation board)

Figure 1. Board identification (1720)

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For further information contact your local STMicroelectronics sales office.

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1 Limitation

1.1 Description

FP-AUD-SMARTMIC1 v1.2.0 has been updated to fully work with the latest generation of the BlueCoin evaluation kit (STEVAL-BCNKT01V1).

The STEVAL-BCNKT01V1 (BlueCoin) production lot "1720" mounts MP34DT04-C1 MEMS microphone instead of MP34DT06J.

In this case, the parameters passed to the AcousticBF and AcousticSL libraries used in FP-AUD-SMARTMIC1 need to be optimized to reach the best audio performance.

1.2 Workaround

To get the best audio performance, when using a "1720" BlueCoin, you have to:

- uncomment `#define BLUECOIN_1720` in audio_application.h

Figure 2. STEVAL-BCNCS01V1: custom code for the 1720 lot

```
75  //#define BLUECOIN_1720    /*Uncomment to configure mic distance for '1720' signed BlueCoin*/
76
77  #if defined (STM32_BLUECOIN)
78  #define TOP_RIGHT_MIC 2
79  #define TOP_LEFT_MIC 3
80  #define BOTTOM_RIGHT_MIC 0
81  #define BOTTOM_LEFT_MIC 1
82
83  #ifdef BLUECOIN_1720
84  #define SIDE_X 40
85  #define SIDE_Y 40
86  #define DIAGONAL 57
87  #else
88  #define SIDE_X 40
89  #define SIDE_Y 34
90  #define DIAGONAL 53
91  #endif
```

- rebuild all files and load the binary on the BlueCoin

The `BLUECOIN_1720` define overwrites the microphone configuration distance, making the example fully working.

Revision history

Table 2. Document revision history

Date	Revision	Changes
12-Oct-2018	1	Initial release.

IMPORTANT NOTICE – PLEASE READ CAREFULLY