

## Evaluating the HC55185 with the HC5518XEVAL Evaluation Platform

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The HC5518XEVAL is configured for evaluation of the HC55180, 181, 182, 183 and 184 devices. With the proper external components (included in the box) the evaluation board may also be used to evaluate the newest addition to the RSLIC18 family, the HC55185.

### Component Kit

There are a few component value differences between the existing products and the new HC55185 as well as an additional resistor to program the new transient current limit feature. The component differences are listed in the following table.

**TABLE 1. COMPONENT DIFFERENCES**

REF DES	HC55180 THRU 184	HC55185
R14	39Ω	51Ω
R15	39Ω	51Ω
RS	210kΩ	66.5kΩ
CFB	0.47μF	4.7μF
CIL	Not Populated	RTL = 18.7kΩ

When evaluating the HC55180 thru 184, the component CIL must not be populated with the current limiting resistor RTL.

Failure to remove the resistor will result in erratic behavior of the HC55180 through 184. Please note some revisions of the HC5518XEVAL will have the CIL designator changed to RTL.

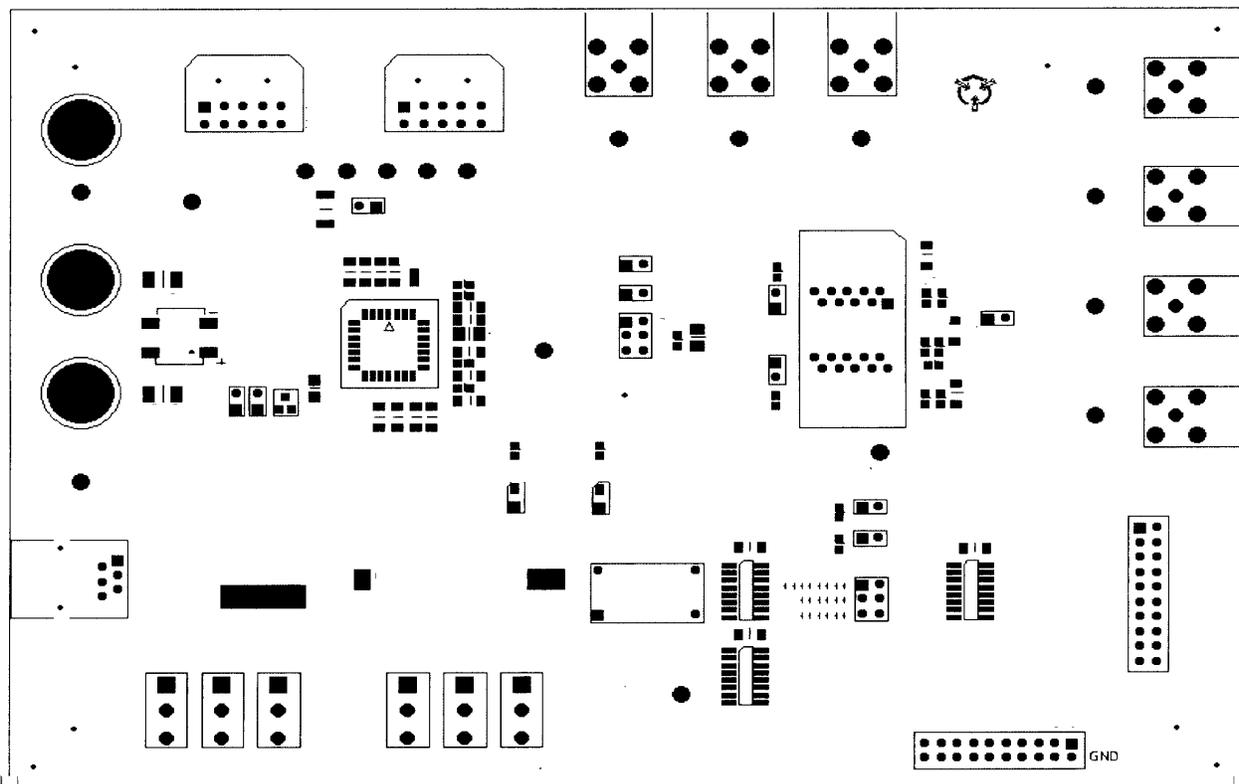
The silkscreen of Figure 1 shows the location of the components which must change for HC55185 evaluation.

### Programmed Settings

Setting the resistor RTL to 18.7kΩ programs the transient current limit to 95mA. Setting RS to 66.7kΩ programs the HC55185's AC impedance to 500Ω. This AC impedance together with the protection resistance results in a 600Ω line circuit impedance.

### Evaluation Board Usage

The HC5518XEVAL can be used in the same manner to evaluate the new HC55185 as it is used for the existing product offering. The eval board is designed for stand alone evaluation of the SLIC as well as an external codec. Clock generation circuitry is included on the eval board to allow for stand alone operation. The details on how to use the evaluation board are included in Application Note AN9814. This document is included in the evaluation board package.



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