AR4100(P) FCC Modular SiP Approval

Application Note

APP-17789 Ver. 1.0

March 30, 2012

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Revision history

Revision	Date	Description
Ver. 1.0	March 2012	Initial release

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1 Overview

This document gives a brief overview of the process for using the Qualcomm Atheros modular SiP approval for AR4100(P) devices. The FCC has granted Qualcomm Atheros AR4100(P) device modular SiP approval. The AR4100(P) is a System-in-Package (SiP) device that implements the majority of the RF design within the SiP. The remaining RF tasks that users must perform are the: 50 Ω trace to the antenna, placement of passive devices, follow layout, and stack-up guides from the Qualcomm Atheros reference design. The AR4100(P) is factory calibrated, which makes the SiP RF performance predictable as long as the user follows the reference design in a copy exactly method. Three different antenna configurations are supported in Qualcomm Atheros modular SiP approval.

NOTE: This document covers both the AR4100 and the AR4100P products. For the purposes of this document, the devices are called out as AR4100(P) to cover both products.

2 Using Modular Approval

To ease the process of using modular SiP approval for AR4100(P), Qualcomm Atheros has arranged with an Authorized Design Center to manage and provide design review services for a low, pre-negotiated fee of $749. This fee also covers the distribution of design materials, which are covered under the non-disclosure clause in the Customer Agreement. These steps must be followed to have the rights to use Qualcomm Atheros modular SiP approval for the AR4100(P).

- Register with the Authorized Design Center and complete the required NDA and acceptance agreements. (www.cardaccessengineering.com/certi-fi).
- Download the design guidelines for FCC certification and copy them exactly as provided.
- When the design is complete, submit the design files to the Authorized Design Center for review. Note that design reviews may take up to five business days.
- Provide credit card payment to the Authorized Design Center.
- Once the design has passed the design review, FCC certificates are released to the customer.

3 Design Center Support

Currently, the only Authorized Design Center qualified to support the Qualcomm Atheros AR4100(P) modular SiP approval flow is Card Access Engineering. The “Certi-Fi” is Card Access Engineering web-based system for administering the AR4100(P) regulatory approval process, which simplifies the modular certification process makes it easy to track. To learn more, visit the web site at:

www.cardaccessengineering.com/certi-fi

Additional information can be directly requested from Card Access Engineering at:

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