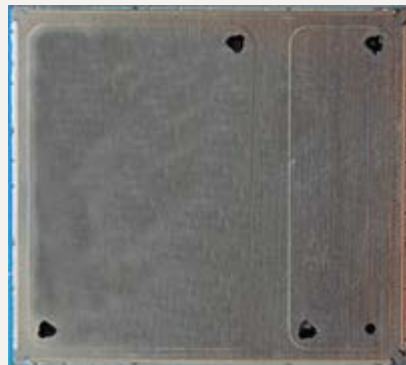


# HW Differences between Cinterion® ALAS5-AM Revisions 1.1.3, 1.1.4b, and 1.2

## Delta Report

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# 1 Introduction

This Delta Report applies to the Gemalto M2M module

**Cinterion® ALAS5-AM**

## 2 Differences between Revisions 1.1.3 and 1.1.4b

ALAS5-AM Revision 1.1.4b uses some components from other vendors than used for Revision 1.1.3 as listed in the table below:

Component Reference	Component	Vendor Rev. 1.1.3	Vendor Rev. 1.1.4b
Z1015	RX Filter Bd 2	RF360	Taiyo Yuden
Z1200	GNSS RX Filter	RF360	Taiyo Yuden
D301	NAND memory	Nanya	Micron
Z910	RX Filter Bd 8	RF360	Taiyo Yuden
Z811, Z830	Diplexer F1 F2	TDK	Walsin
Z801	Directional Coupler	TDK	Walsin
Z802	TX lowpass filter GSM1800/1900	TDK	Walsin

The intention behind using components from other vendors is to remove the dependency on a single vendor.

A lot of care is taken to select components that are equivalent in form, fit, and function.

Testing and qualification measurements show that there is no impact on GCF, PTCRB, FCC, RED.

## 3 Differences between Revisions 1.1.4b and 1.2

There are no hardware differences between ALAS5-AM Revision 1.1.4b and Revision 1.2.

Background:

Rev. 1.1 was succeeded by Rev. 1.1.1, Rev. 1.1.2, Rev. 1.1.3, and Rev. 1.1.4b.

Now, in order to release a formally correct set of production data, Revision 1.1.4b was simply cloned to Revision 1.2.

## About Gemalto

Since 1996, Gemalto has been pioneering groundbreaking M2M and IoT products that keep our customers on the leading edge of innovation.

We work closely with global mobile network operators to ensure that Cinterion® modules evolve in sync with wireless networks, providing a seamless migration path to protect your IoT technology investment.

Cinterion products integrate seamlessly with Gemalto identity modules, security solutions and licensing and monetization solutions, to streamline development timelines and provide cost efficiencies that improve the bottom line. As an experienced software provider, we help customers manage connectivity, security and quality of service for the long lifecycle of IoT solutions.

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