Coronis Systems

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TO: TIMCO

Subject: Permissive change.

**Product : Waveport CF** 

FCC ID: S28-WPOCF

Dear Sir/Madam,

### Introduction

Coronis Systems would like to change the layout, the BOM and the schematic of the Waveport CF (Previously know under FCC ID: S28-WPOCF).

This permissive change allows the approval of this new compact flash which is tested and qualified for mass production. The old card which was approved by FCC is still a prototype and not yet commercialized because still in development.

### 1/ Changes

The equipment changes concern:

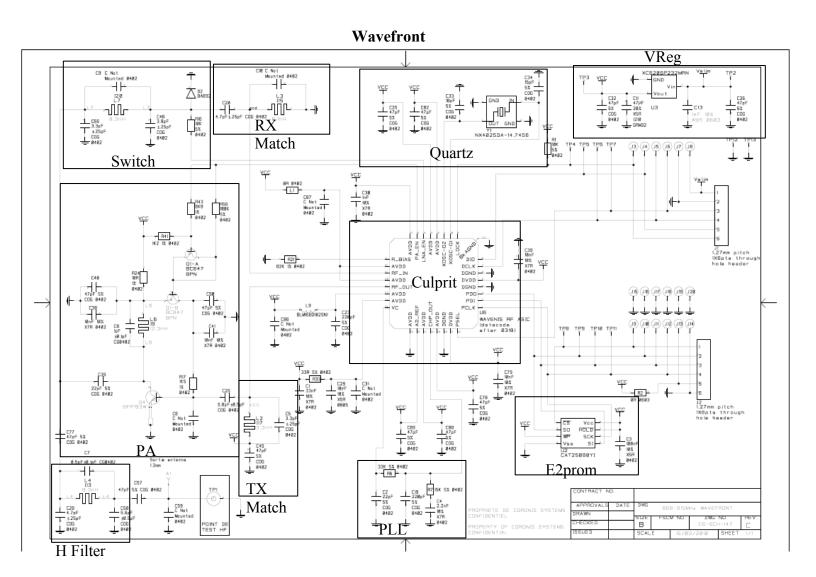
- → Schematic (cf Schematic waveport CF.pdf)
- → Bill Of Material (cf Part list Waveport CF.pdf)
- → Layout (cf Layout\_Waveport CF 1.pdf and Layout Waveport CF 2.pdf)

# 2/ Changes details:

### 2.1/ Similitude between old and new CF versions:

- → In the old Compact Flash we use a *Wavefront module* containing only the RF part of Coronis. The Wavefront is composed by:
  - RF transceiver (CULPRIT),
  - FILTERS,
  - POWER AMPLIFIER PART,
  - QUARTZ.

We add to this card an E2PROM and a 2.3V Regulator.

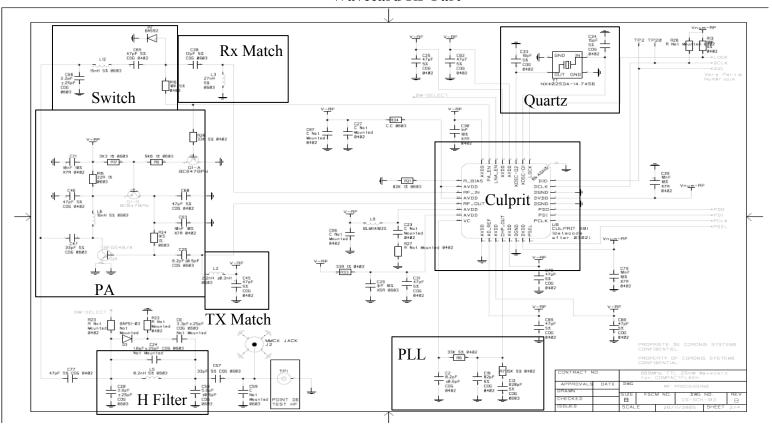


→ In the new Compact Flash, we use <u>Wavecard module</u> connected with a PCMCIA interface realized by JIDELEC company (JIDELEC provides schematic and layout to Emitech for confidentiality).

The Wavecard is composed by:

- The same RF part as Wavefront (the passive components for adaptation are different but the all functions are the same);
- A data processing part;
- A power supply part.

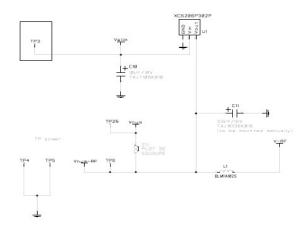
### **Wavecard RF Part**



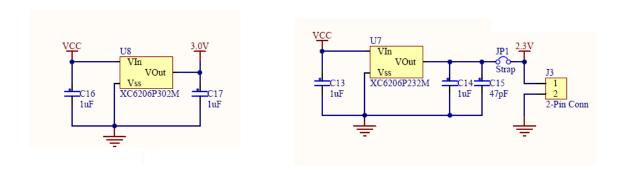
# 2.2/ Differences between old and new CF versions:

# ➤ Power supply part

• Power supply part of Wavecard for this new CF.



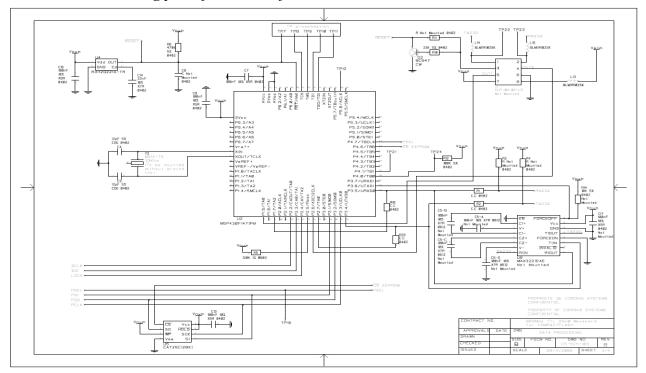
• Power supply of old CF



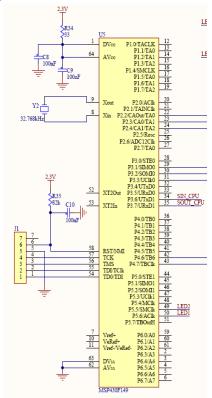
We still use the same regulator XC6206P302M as in the old card but we removed the XC6206P232M regulator.

# Data Processing part:

• Data Processing part of Wavecard for this new CF



• Data Processing part of old CF



We use the same MSP430F149 microcontroller, but the interfaces levels are different.

### > Layout

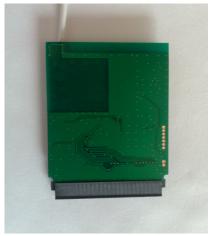
Concerning the layout it's absolutely different because the two cards different.



Bottom side of new CF



Up side of new CF



Bottom side of old CF



Up side of old CF

To sum up, the functionalities and RF performances of both products stay the same. We use the Wavenis protocol with the same Stack, channel, modulation, deviation and power.

Best Regards.

Nom manuscrit, fonction et signature

Fabier BONJOUR

RF Manager

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