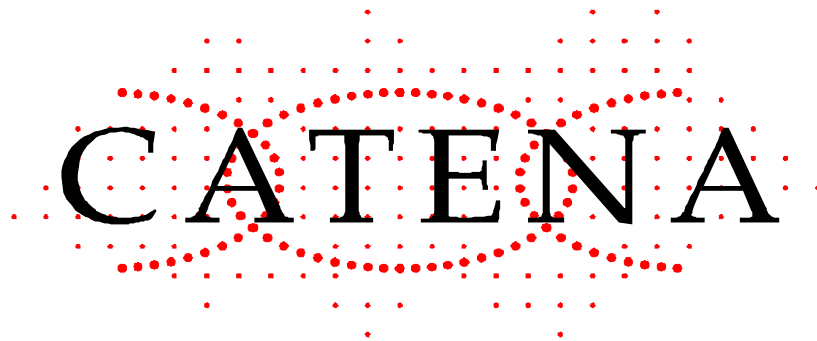


# PROJECT: WFAC2X2

## FIRMWARE RELEASE NOTE



Document Information	
Project Number/Name:	<b>Error! Unknown document property name.</b> / WFAC2x2
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Document Number:	
Revision Number:	0.2
Status:	Accepted

# Revision Control

Revision	Author	Purpose and Brief Summary of Changes	Date
0.1	E. de Kievit	Describe firmware release R0.8.001	May 15, 2020
0.2	H. Stoorvogel	Update section 3.3 and chapter 5	May 15, 2020

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# 1 INTRODUCTION

## 1.1 Document Purpose and Scope

This document describes the content of the firmware releases for the WFAC2x2 project, variant Begonia MPW1.

## 1.2 References

Table 1-1 References

Doc #	Reference	Name	Date
19CAIN01_C06S017	[UM]	User Manual v1.1	Dec 10, 2019
17CAIN09_C06S009	[AMG]	API Migration Guide v1.0	Sept 25, 2019

## 1.3 Abbreviations and Definitions

Table 1-2 Abbreviations

Abbreviation	Meaning

Table 1-3 Definitions

Definitions	Meaning

## 2 RELEASE PACKAGE

### 2.1 Version Identification

Identifier	Value
target	MPW1
firmware version	R0.8.001

For this release, the GetVersion command will reply with the following information:

Identifier	Value
hw_major	01
hw_minor	B0 for MPW1
target_ver	1
fw_major	0
fw_minor	8
build_nr	1

### 2.2 Package Content

The release package contains the following files:

File	Description
WFAC22_01B0_prog.mem	Program memory file, to be loaded by the host
WFAC22_01B0_init.mem	Initialization file, to be loaded by the host

Please follow the load and boot instructions as explained in the [UM].

## 3 RELEASE CONTENT

### 3.1 Goal

The main goal of this release is to provide firmware that does housekeeping and supports the TRX\_Transmit command with the paths disable function.

### 3.2 Supported Functionality

The table below shows which commands are part of this release, and if there are limitations for the command in this release.

**Table 3-1 command overview**

Command	Status
GEN_GetVersion	Functional
APP_GetStatus	Functional
APP_Sleep	-
APP_Activate	Functional
APP_Deactivate	Functional
APP_GetTemperature	Functional
APP_Calibrate	Functional
APP_CalResistor	-
APP_SetResistor	Functional
APP_ConfigTrx	Functional
APP_ConfigFemCtrl	Functional
CLK_SetXo	Functional
TRX_Receive	Functional
TRX_Transmit	Functional
TRX_Stop	Functional
TRX_Park	Functional
TRX_Prepare	Functional
TRX_GetStatus	Functional
TRX_SetTestDc	Functional

### 3.3 Improved Performance

Housekeeping increases stability and performance over temperature.

## 4 KNOWN PROBLEMS & LIMITATIONS

On host level, the timing of the timeout functions needs to be checked for the following:

1. After having loaded the WFAC22\_01B0\_init.mem, the booting will take up to 4 ms.

## 5 TEST RESULTS

### MPW1-RFP-06

