CMV12000 - v1 vs v2

The differences between CMV12000 version 1 and 2
# Content Guide

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1 Introduction

The CMV12000 currently has 2 versions: version 1 (mpn: CMV12000-1Exxxxx) and version 2 (mpn: CMV12000-2Exxxxx). This document describes the differences between the two versions and can be used for replacing a v1 sensor with a v2 sensor.

1.1 Ordering Information

<table>
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<th>Ordering Code</th>
<th>Description</th>
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<tr>
<td>CMV12000HG-1xxxxx</td>
<td>CMV12000 version 1</td>
</tr>
<tr>
<td>CMV12000-2xxxxxx</td>
<td>CMV12000 version 2</td>
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2 Differences

2.1 Improvements

Version 2 is an improved revision of v1. The improvements done on v2 are:

- Increased maximum input clock from 300MHz to 600MHz and therefore doubling the frame rate from 150fps to 300fps (in 10b mode)
- Improvements on row and column fixed pattern noise (FPN)

2.2 Compatibility

The CMV12000 v2 is fully pin and electrically compatible with v1 and can therefore be used on the same hardware.

Version 2 can also run at 300MHz instead of 600MHz (see datasheet for procedure and settings).

There are no opto-electrical specification differences between the two versions.

The CMV12000 v2 uses different recommended register settings and has a separate datasheet (datasheet v1.xx vs v2.xx).

So version 2 is a ‘drop-in replacement’ for v1 when the correct datasheet settings are used.
3 Revision Information

<table>
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<th>Changes from previous version to current revision v1-00</th>
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- Page and figure numbers for the previous version may differ from page and figure numbers in the current revision.
- Correction of typographical errors is not explicitly mentioned.
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