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Type of Document: FM	TMC429 Product Compatibility Declaration (PCD)	Version: 1.00	Date: 01.04.2011

Purpose of this Document

Discontinued technologies, enhancements, cost reduction force the development of new components. The goal of this document form is to declare the grade of compatibility between TRINAMIC products. The grade of compatibility ranges from software compatibility to 1-to-1 replacement compatibility.

1 Product Parameters

TRINAMIC Product Name :	TMC428 (package variants TMC429-I and TMC429-PI24)
Status :	TMC429 Full Production since March 2011
Compatible Products :	TMC429 (package variants TMC428-I and TMC428-PI24)
Grade of Compatibility :	<ul style="list-style-type: none"> • 100% package compatibility (SSOP-16 package) with same footprint and pinning • 100% package compatibility (SOP-24 package) with same footprint and pinning if n.c. pins (1, 12, 13, 28) of the TMC428-PI24 are not connected • 100% register set compatibility • 100% pin-to-pin compatibility
Comments :	<p>The TMC429-I is the successor of the TMC428-I and replaces it. It has the same register set and can be mounted instead of the TMC428-I.</p> <p>The former n.c. pins 1, 12 of the TMC428-PI24 (SOP-24 package variant) are additional outputs for the TMC429-PI24; the former n.c. pins 13, 24 are inputs with internal pull-down resistors.</p>
Incompatibilities :	-
Differences :	The TMC429-I and TMC429-PI24 have additional functions mapped in register address spaces and registers that were unused within the TMC428-I / TMC428-PI24 datasheet.
Product Compatibility Declaration :	TRINAMIC declares that the TMC429-I (SSOP16 package variant) can be used in a TMC428-I environment instead of the TMC428-I. The TMC429-PI24 (SOP24 package variant) is a 100% compatible drop-in replacement for the TMC428-PI24 within a TMC428-PI24 environment if the pins (1, 12, 13, 28) are not connected.

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2 Literature (auxiliary material, other documents)

- TMC428 Datasheet, www.trinamic.com
- TMC429 Datasheet, www.trinamic.com

3 Revision

Revision	Date / Author	Comment
1.00	05.04.2011 / LL	Initial version of the Product Compatibility Declaration for TMC429 (full production)