

# MOST

Media Oriented Systems Transport

Multimedia and Control  
Networking Technology

**MOST Specification of Physical Layer**  
**Rev. 1.1 Addendum E**  
**07/2011**

**MOSTCO CONFIDENTIAL**

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## Document References

All documents which this MOST document has references to are listed here with the actual revision this document is referring to.

Number	Document	Revision
[1]	MOST Specification Of Physical Layer [MOST25]	Rev. 1.1
[2]	MOST150 oPhy Automotive Sub-Specification [MOST150]	Rev. 1.1

## Document History

First version 1.0-00

Change Ref.	Section	Changes
-	-	- First version, no changes

# 1 Introduction

This document is a supplement to the **MOST Specification of Physical Layer, Rev 1.1** [1]. It specifies the usage of MOST150 SMD package [2] as an option also for MOST25.

## 2 Content of Addendum

### 2.1 SMD Package

References for drawings related to the SMD FOT package are listed in Table 2-1.

Drawing Code	File Name
MOST150 FO-Transceiver	MOST150 FO-Transceiver_SMD_AVx.PDF
	PDF Files are available on <a href="http://www.mostcooperation.com">www.mostcooperation.com</a> x indicates version number of drawing file

Table 2-1: Drawing Codes and File Names for the SMD FOT

The corresponding up-to-date drawings have to be applied.

#### 2.1.1 SMD FOT Pin-out

An EOC and OEC shall be combined into one 24-pin surface mount package having a body of 7.5 mm x 15.6 mm. The pin-out is shown below. The printed circuit board footprint shall be compatible with the JEDEC standard package type R-PDSO-G.

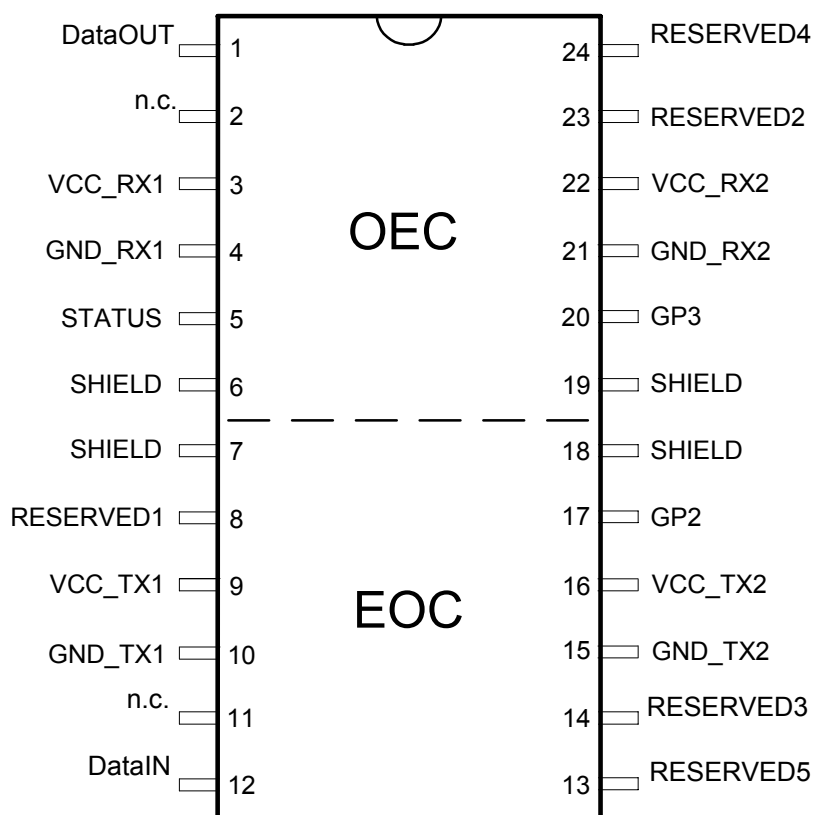


Figure 2-1: SMD Transceiver Pin-out

## 2.1.2 OEC Signal Descriptions

The SMD OEC section illustrated in **Fehler! Verweisquelle konnte nicht gefunden werden.** must conform to the pin-out and signal functionality as described in Table 2-2.

Pin Name	Pin No.	Functional Description
DataOUT	1	OEC data output.
n.c.	2	Not connected.
VCC_RX1	3	Power supply pin for the digital circuitry.
GND_RX1	4	Ground return for the digital circuitry.
STATUS	5	STATUS output. Logic Low when the OEC is in the On-State. Logic High when the OEC is in the Off-State (*).
SHIELD	6, 19	Internal EMI shield. Connect to the OEC side ground on the PCB.
GP3	20	General purpose pin, not used for basic MOST functionality. The OEC must be MOST compliant independent of whether this pin is left unconnected or connected to external circuitry described in the OEC datasheet.
GND_RX2	21	Ground return for the analog circuitry.
VCC_RX2	22	Power supply for the analog circuitry.
RESERVED2	23	Reserved for future use in MOST. On the PCB, connect to VCC_RX2 through a 0-Ohm resistor.
RESERVED4	24	Connect according OEC datasheet.

Table 2-2: Signal Descriptions for the OEC

(\*) Note: It is highly recommended to implement the wake-up mechanism comparable to MOST150 for switching between On-State and Off-State and vice versa.

## 2.1.3 EOC Signal Descriptions

The SMD EOC section illustrated in **Fehler! Verweisquelle konnte nicht gefunden werden.** must conform to the pin-out and signal functionality as described in Table 2-3.

Pin Name	Pin No.	Functional Description
SHIELD	7, 18	Internal EMI shield. Connect to the EOC side ground on the PCB.
RESERVED1	8	Reserved for future use. On the PCB, connect to ground through a 0-Ohm resistor.
VCC_TX1	9	Power supply for the EOC.
GND_TX1	10	Ground return for the EOC power supply.
n.c.	11	Not connected.
DataIN	12	EOC data input.
RESERVED5 (/RST)	13	Reserved pin: Active-low logic input signal that disables optical output. If reserved pin is not used, connect to VCC.
RESERVED3	14	Connect according EOC datasheet.
GND_TX2	15	Ground return for the EOC power supply.
VCC_TX2	16	Power supply for the EOC.
GP2	17	General purpose pin, not used for basic MOST functionality. The EOC must be MOST compliant independent of whether this pin is left unconnected or connected to external circuitry described in the EOC datasheet.

Table 2-3: Signal Descriptions for the EOC

## 3 Comment

### 3.1 Reason for Addendum

Reuse of MOST150 SMD of package [2] for MOST25.

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