


# AFE7769 quad-channel RF transceiver evaluation module

AFE7769EVM

 ACTIVE

 Description & Features

 Technical Documents

 Support & Training

 Order Now

## Important Note

AFE7769EVM user's guide is available. [Request now](#) >

[View all related products](#) 

## Description

The AFE7769 evaluation module (EVM) is a board used to evaluate the AFE77xx family of integrated RF transceivers. AFE77xx devices support up to four-transmit, four-receive, and two feedback channels (4T4R2F) and integrate phase-locked loops (PLLs) and voltage-controlled oscillators (VCOs) for generation of data-converter clocks and LO, with LO frequency tunable from 600 MHz to 6 GHz.

This standard EVM incorporates RF baluns to specifically support 600 MHz to 2700 MHz. The AFE77xx device integrates eight JESD204B/C-compatible serializer/deserializer (SerDes) transceivers capable of running up to 29.5 Gbps to transmit and receive digital data through the onboard FMC connector.

AFE7769EVM includes the LMK04828 clock generator for providing reference clocks and sysref to the AFE and capture card (FPGA). The EVM works off a single 6-V input and includes complete power management. External clocking options include support for feeding the reference clock (for on-chip PLL) or the channel frequency (at 2x LO).

The design interfaces with TI pattern/capture card solutions (TSW14J56EVM and TSW14J57EVM, sold separately), as well as many FPGA development kits.

## Features

- Evaluates AFE77xx integrated transceiver family of devices
- Simplified digital interface with JESD204B/C; supports up to 29.5-Gbps lane rates
- JESD subclass 1 for multiple-device synchronization
- Onboard clocking solution with optional external feed
- Onboard power-management scheme

## What's Included

- AFE7769 evaluation module
- USB cable
- Power cable

## Order Now

Part Number	Buy from Texas Instruments or Third Party	Buy from Authorized Distributor	Status
AFE7769EVM: AFE7769 quad-channel RF transceiver evaluation module	<div>\$1999.00(USD)</div> <div>Add to cart</div>	<div>Pricing may vary.</div> <div>Buy from distributor</div>	ACTIVE
Contact a Distributor <div>Netherlands</div> <div>Go</div>			

 TI's [Standard Terms and Conditions for Evaluation Items](#) apply.

## Technical Documents

## Design files (1)


Title	Type	Size (KB)	Date
Downloaded from <a href="#">Arrow.com</a>	zip	12400	04 Jun 2019



AFE7769EVM AFE7769 quad-channel RF transceiver evaluation board image

Title	Type	Size (KB)	Date

More literature (1)

Title	Type	Size (KB)	Date
 <a href="#">AFE7769EVM EU Declaration of Conformity (DoC)</a>	PDF	36	20 May 2019

Related Products

Design Kits & Evaluation Modules ( 2 )

Name	Part Number	Tool Type
<a href="#">Data capture/pattern generator: data converter EVM with 16 JESD204B lanes from 1.6-15Gbps</a>	TSW14J57EVM	Evaluation Modules & Boards
<a href="#">Data capture/pattern generator: data converter EVM with 8 JESD204B lanes from 0.6-12.5Gbps</a>	TSW14J56EVM	Evaluation Modules & Boards

TI Devices (4)

Part Number	Name	Product Family
<a href="#">AFE7769</a>	Quad-channel RF transceiver with dual feedback paths and four PLLs	Wideband transceivers, receivers, transmitters
<a href="#">AFE7799</a>	Quad-channel RF transceiver with dual feedback paths	Wideband transceivers, receivers, transmitters
<a href="#">LMK04828</a>	Ultra-low jitter synthesizer & jitter cleaner	Clocks & timing
<a href="#">TPS54424</a>	4.5V to 17V Input, Current Mode, 4A Synchronous SWIFT™ Step-Down Converter	Step-down (buck)