Description

The F4482 is a 1300MHz to 2800MHz Quad Path Tx DVGA with matched 100Ω differential input and 50Ω single-ended output impedances for ease of integration into the signal path.

Using a single 3.3V power supply and only 485mA of I_{CC}, the F4482 provides four independent transmit paths, each with 27.5dB typical maximum gain, +16.5dBm output P1dB. Each channel includes a glitch-free digital step attenuator that reduces gain by up to 31.5dB in precise 0.5dB steps.

Packaged in an 8 × 8 mm, 56-LGA package, this device is part of a complete family of VGAs targeting FDD and TDD applications within the 400MHz to 4200MHz frequency range.

Typical Applications

- 4G and 5G Multi-mode, Multi-carrier transmitters
- LTE and UMTS/WCDMA base stations
- Active antenna systems
- Digital radio

Features

- Independent Quad Channels for FDD Tx Applications
- RF Range: 1300MHz to 2800MHz
  - F4481: 400MHz to 1100MHz
  - F4483: 3000MHz to 4200MHz
- 27.5dB Typical Maximum Gain at 2100MHz
- Precise SPI-Controlled Glitch-Free™ Gain Adjustment
  - 31.5dB Gain Range with 0.5dB Step Size
- +16.5dBm Output P1dB at 2100MHz
- 3.3V supply voltage
- I_{CC} = 485mA
- 100Ω Differential Input Impedances
- 50Ω Single-ended Output Impedances
- 1.8V and 3.3V Logic Support
- Independent Channel Standby Modes for Power Savings
- Operating Temperature (T_{EP}) Range: -40°C to +115°C
- 8 × 8 mm, 56-LGA package

Block Diagram
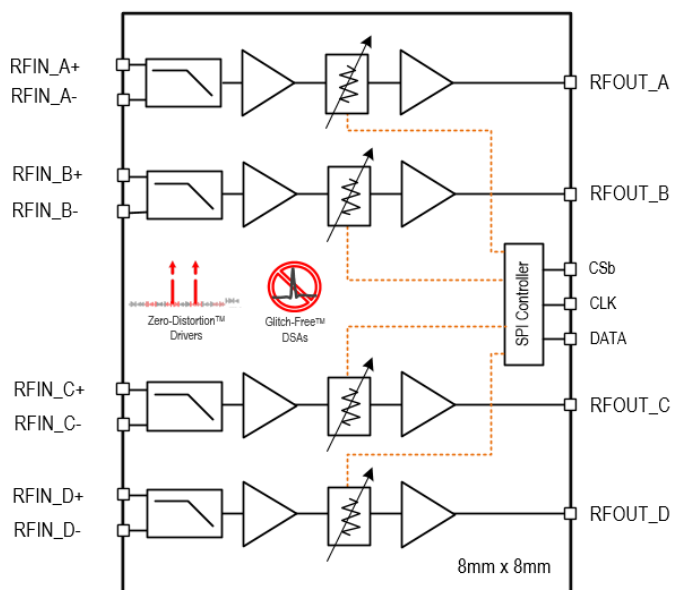
Ordering Information

Orderable Part Number	Package	MSL Rating	Shipping Packaging	Temperature
F4482LKGI	8 × 8 × 0.65 mm 56-LGA	TBD	Tray	-40° to +115°C
F4482LKGI8	8 × 8 × 0.65 mm 56-LGA	TBD	Reel	-40° to +115°C
F4482EVB	Evaluation Board			
F4482EVS	Evaluation Kit			

Revision History

Revision Date	Description of Change
May 11, 2020	Initial release.

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