

Product Brief

FSX010125ST65

INTEGER-N, PLL

General Description

The FSX010125ST65 is an integer PLL optimized for an input reference frequency ranging from 10MHz to 125MHz and a frequency output ranging from 160MHz to 2GHz. It is ideally suited for applications that require a low power, low jitter, clock multiplier as over-sampled data converters and high-speed Serializer Deserializer (SerDes).

Applications

- Data converter clocking
- Clock multiplication
- SerDes

STATUS

Pre-development

Benefit and Features

- Process : 65nm CMOS LP/GP (1P7M)
- Type II, 3rd-order loop filter
- Integrated jitter from 10kHz to 40MHz : <1ps
- Low power : 10mW
- Output duty cycle : 50% \pm 5%
- -40°C to +125°C junction temperature
- Supply voltage : 1.2V \pm 10%
- Area : NDA required
- Power down mode

Deliverables

- Layout view (GDSII)
- Characterization report
- Behavioral model (Verilog-A)
- Data Sheet
- Characterization report
- Integration support

Customization and porting

The FSX010125ST65 will be evaluated and verified on silicon by our design team soon. This IP will be available as a hard macro-cell. It is scalable and portable with respect to manufacturing process and can be customized as necessary for the required application.

Our qualified approach greatly increases the probability of right-first-time designs while minimizing time-to-market and reducing developments costs.

About SCALINX

SCALINX is a fabless company designing state-of-the-art Analog and Mixed-Signal Integrated Circuits and Intellectual Property blocks for Communications and Industrial markets. Our core business is to provide tailored solutions to OEMs and semiconductor companies developing high-end systems and circuits with ultra-low power requirements and reduced Bill of Material.

Our expertise is in the field of signal conditioning, data conversion systems (ADC/DAC) and digital processing.

SCALINX's IC design team has a cumulated expertise of more than 100 years in the semiconductor industry with a proven track record of first-time right tape-outs that led to several successful business stories.