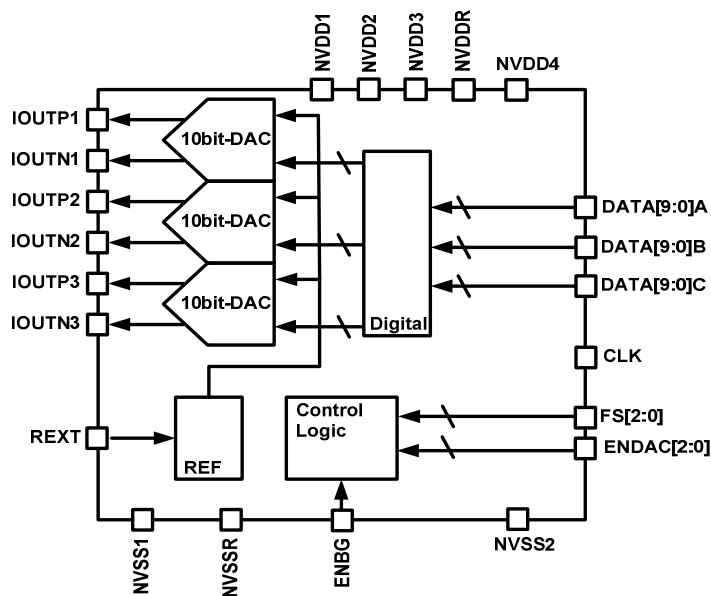# IGADACT01C

28nm HPM 1.8V/0.9V

10bit 300MHz Current Steering DAC [3ch]

## Product Overview

The **IGADACT01C** is a general-purpose 3-channel digital-to-analog converter with 10bit resolution. This IP contains complementary segment current source, and parallel digital interface. The reference and bias circuits provide the adjustable current output: 12.5mA to 34mA. Output compliance range is up to 1.3V.

Power down mode is available to disable the DAC and lower down the power consumption.



**Block Diagram**

## FEATURES AND BENIFITS

### Features

- 10bit resolution
- Up to 300MHz conversion rate
- Current output 12.5 ~ 34mA adjustable
- Power-down mode is available
- 0~1.3V compliance range
- 0.9V digital power supply operation
- Operation temperature range:-40℃~125℃
- 28nm HPM 1.8V/0.9V CMOS process with 1P6M layout (4X1Z)

# IGADACT01C

## Deliverables

| Item | Description | Format |
|------|-------------|--------|
| 1 | Comprehensive Document | PDF |
| 2 | Hard Macro | GDSII & netlist |
| 3 | Synopsys™ Synthesis Model | .lib / .db |
| 4 | Verilog Model | Verilog |
| 5 | TLF Model | Script |
| 6 | LEF Model | Script |

## Ordering Information

The GUC 28nm HPM 1.8V/0.9V 10bit 300MHz Current Steering DAC IP is available as shown below.

| Part Number | IP Option |
|-------------|-----------|
| IGADACT01C | 28nm HPM 1.8V/0.9V 10bit 300MHz Current Steering DAC [3ch] |

NOTE: Consult your GUC sales representative for feature availability and schedule.

## Global Unichip Design Excellence

GUC, the Flexible ASIC Leader™, provides a comprehensive suite of Flexible ASIC Services from silicon-proven IP to complete SoC integration and delivery. Founded in 1998, GUC is publicly traded on the Taiwan Stock Exchange.

GUC's design services cover all fabrication technologies from mature processes up to the most advanced 28nm node. At the most advanced nodes, high complexity, noise coupling, electro migration, dynamic IR drop and design for manufacturing (DFM) problems now exceed the capability of traditional design methodology. That's why GUC provides an advanced technology design flow that includes a quick prototyping step to achieve rapid timing and signal integrity closure.

As an added assurance, all of GUC IP are silicon-proven and designed with manufacturability, test, and yield considerations in mind. GUC provides a total IP solution through FPGA platform verification for a variety of products.

GUC's in-house IP Portfolio includes DDR, High Speed Interface, Data Converter, Hardened ARM Core, Multimedia and specialized IP. GUC's IP Eco-System provides the flexibility to work with IP from GUC, TSMC and other vendors, creating the widest range of design options.

Based in Hsinchu Taiwan, GUC has developed a global reputation with a presence in China, Europe, Japan, Korea, and North America. With a solid track record of shipping more than150 million complex SoC units to date, GUC provides the fastest time-to-market at the lowest possible risk.

For more information about this product or other Global Unichip services please visit us on the web at www.guc-asic.com.

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