

## Features

High performance with low power consumption options

Advanced RISC Architecture

131 Instructions over 80% execute in a single cycle

32 x 8 General purpose working registers

Up to 32MHz with 32 MIPS

Internal single cycle multiplier (8x8)

Non-Volatile program and data memory

32Kbytes On-chip programmable Flash Memory

2Kbytes SRAM

Programmable EEPROM supports byte access

Program encryption

Two independently prescaled 8 Bit timers

Input capture and output compare modes

Internal 32KHz oscillator for Real Time Clock function

Up to 9 PWM outputs, Programmable dead-band control

12 Bit High Speed ADC with up to 12 channels

Optional internal or external voltage reference

Programmable Gain Amplifier (X 1/8/16/32)

Differential input channels

Automatic threshold voltage monitoring mode

Internal 1.024V / 2.048V / 4.096V Reference  $\pm 1\%$

8 Bit programmable DAC

Watchdog timer

Synchronous and Asynchronous serial Interface

SPI with programmable master/slave TWI compatible

I2C with Master/Slave mode

16 Bit arithmetic accelerator unit (DSC)

SWD debug interface

POR built in power on reset circuit

LVD Low voltage detection circuit

### 8-bit LGT8XM

RISC Microcontroller with  
In-System Programmable  
FLASH Memory

**LGT8F88P**

**LGT8F168P**

**LGT8F328P**

Data book

Version 1.0.4 J

● **Packaging** QFP48/32L, SSOP20L

● **Power** 1uA@3.3V

● **Features**

Voltage 1.8V ~ 5.5V

Frequency 0 ~ 32MHz

Temperature -40C ~ +85C

HMB ESD > 4KV

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