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-Volitile 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 +-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