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

Built-in 1% Can be calibrated 32MHz RC Oscillator frequency output Built-in support 1% Can be

calibrated 32KHz RC Oscillator external support 32.768KHz as well as 400K ~ 32MHz Crystal Input

6x High current push-pull drive IO Support high-speed PWM application

8-bit LGT8XM

RISC Microcontroller with
In-System Programmable
FLASH Memory

LGT8F88P
LGT8F168P
LGT8F328P

Data book
Version 1.0.4

Applications

Motor-driven

automation and

control home appliances

● **Packaging** QFP48/32L, SSOP20L
● **Power** 1uA@3.3V
● **Features**

Voltage	1.8V ~ 5.5V
Frequency	0 ~ 32MHz
Temperature	-40C ~ +85C
HMB ESD	> 4KV