R01MR0459EJ0101
Rev.1.01

ROM number	

RENESAS ELECTRONICS
SINGLE-CHIP 16-BIT MICROCOMPUTER
R5F2L388MNXXXFA

ROM PROGRAMMING CONFIRMATION FORM

Receipt	Date:	
	Section mgr signature	PIC signature

Note: Please fill in all items marked ∗.

∗ Applicant	Company Name	TEL ( )	Applicant signature	Submitted by
	Date issued	Year / Month / Date Date:		

∗ 1. Mask file
Please kindly verify and confirm the mask file in the submitted CD-R prior to submission.
Please submit mask files on CD-R. And the number of the mask file must be 1 mask file per one CD-R.

Part Number ☐ R5F2L388MNXXXFA

File Code [ ][ ][ ][ ][ ][ ][ ][ ] (hexadecimal notation)

Mask file name [ ][ ][ ][ ][ ][ ][ ][ ] .MSK (no more than 8 characters)

∗ 2. Mask option
Set the mask option in the mask file generating utility as follows:

☐ Address : 10h   ☐ Data : 01h

∗ 3. ROM data which must be set by user
Check the option function select registers (OFS, OFS2) and ID code areas to be set for appropriate values as ROM data.

☐ OFS register   ☐ OFS2 register   ☐ ID code areas

C A U T I O N :
Note 1 : ROM order of this product programs the Data Flash area.
Note 2 : ROM data confirmation request
  ROM programming will be processed based on the mask file generated by the mask file generating utility. Only in case when ROM data programmed in the actual mass produced product differs from that of above mentioned mask file, RENESAS takes the responsibility. There is no Engineering Sample, thus please confirm the ROM data at the receipt of the Initial product delivery.
  Should you find any problem, please return immediately. 2 weeks without technical error feedback towards RENESAS will automatically be regarded as acceptance of products.

Note 3 : Mark specification
Please refer to Fig. 1 about mark specification.

R5F2L388MN
yyyFA
z dddd
XXXXXXX
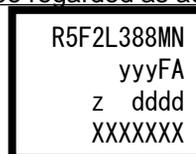
yyy : ROM number
XXXXXXX : Lot number
d,z : Internal supervision number

Fig. 1

ROM number	

RENESAS ELECTRONICS
SINGLE-CHIP 16-BIT MICROCOMPUTER
R5F2L388MNXXXFA
ROM PROGRAMMING CONFIRMATION FORM

Usage conditions
For our reference of new products, please reply to the following questions about the usage of the products you ordered.

(1) What is the voltage of power supply (Vcc) you use?
    Typ. = _____ V   Min. = _____ V   Max. = _____ V

(2) What is the ambient temperature you use?
    Typ. = _____ ℃   Min. = _____ ℃   Max. = _____ ℃

(3) On which condition will you use Reset? (Plural answers are possible.)
    ☐ Hardware Reset   ☐ Power-on Reset   ☐ Voltage monitor 0 Reset
    ☐ Watchdog timer Reset   ☐ Software Reset

(4) On which condition will you use Voltage monitor 0 Circuit?
                                     ☐ Use   ☐ Not use
    Voltage Detection 0 Level Select ☐ 3.80V   ☐ 2.85V   ☐ 2.35V   ☐ 1.90V

(5) On which condition will you use Voltage monitor 1 Circuit?
                                     ☐ Use   ☐ Not use
    Voltage Detection 1 Level Select ☐ 2.20V   ☐ 2.35V   ☐ 2.50V   ☐ 2.65V
                                      ☐ 2.80V   ☐ 2.95V   ☐ 3.10V   ☐ 3.25V
                                      ☐ 3.40V   ☐ 3.55V   ☐ 3.70V   ☐ 3.85V
                                      ☐ 4.00V   ☐ 4.15V   ☐ 4.30V   ☐ 4.45V

(6) Will you use Voltage monitor 2 Circuit?
                                     ☐ Use   ☐ Not use
    Voltage Detection 2 Target   ☐ Vcc   ☐ LVCMP2

(7) On which condition will you use High-speed clock?
    High-Speed On-Chip Oscillator   ☐ Use   ☐ Not use
    Frequency   ☐ 40MHz   ☐ 36.864MHz   ☐ 32MHz
    Division ratio   Divide-by-_____mode

    XIN-XOUT Oscillates   ☐ Use   ☐ Not use   ☐ External clock input
    Oscillator type   ☐ Crystal Oscillator ☐ Ceramic resonator ☐ Others(   )
    Frequency   f(XIN) =_____MHz
    Load capacity   XIN side =_____pF   XOUT side =_____pF
    Internal feedback resistance   ☐ Use   ☐ Not use
    Oscillation stop detection   ☐ Use   ☐ Not use

(8) On which condition will you use Low-speed clock?
    XCIN-XCOUT Oscillates   ☐ Use   ☐ Not use
    Oscillator type   ☐ Crystal Oscillator ☐ Others(   )
    Frequency   f(XCIN) =_____kHz
    Load capacity   XCIN side=_____pF   XCOUT side=_____pF
    Internal feedback resistance   ☐ Use   ☐ Not use

ROM number	

RENESAS ELECTRONICS
SINGLE-CHIP 16-BIT MICROCOMPUTER
R5F2L388MNXXXFA
ROM PROGRAMMING CONFIRMATION FORM

(9) On which condition will you use System clock division ratio?
☐ No division mode ☐ Divide-by-2 mode ☐ Divide-by-4 mode
☐ Divide-by-8 mode ☐ Divide-by-16 mode

(10) Which Power control mode will you use? (Plural answers are possible.)
☐ Wait mode ☐ Stop mode ☐ Power-off mode

(11) Will you use Flash memory?

CPU rewrite mode	☐ Use		☐ Not use
ROM code protect	☐ Use		☐ Not use
Low-Current-Consumption Read Mode	☐ Use	CPU clock frequency =_____kHz	☐ Not use
Erase-suspend	☐ Use		☐ Not use
BGO function	☐ Use		☐ Not use

(12) Which timer mode will you use?

Timer RA ☐ Use ☐ Not use
Operation mode ☐ Timer mode ☐ Pulse output mode ☐ Event counter mode
☐ Pulse width measurement mode ☐ Pulse period measurement mode
Count source ☐ f1 ☐ f2 ☐ f8 ☐ fOCO ☐ fC32 ☐ fC

Timer RB ☐ Use ☐ Not use
Operation mode ☐ Timer mode ☐ Programmable one-shot generation mode
☐ Programmable waveform generation mode ☐ Programmable wait one-shot generation mode
Count source ☐ f1 ☐ f2 ☐ f8 ☐ Timer RA under flow

Timer RC ☐ Use ☐ Not use
Operation mode ☐ Timer mode ☐ Input capture function ☐ Output compare function
☐ PWM mode ☐ PWM2 mode
Count source ☐ f1 ☐ f2 ☐ f4 ☐ f8 ☐ f32 ☐ fOCO40M
☐ fOCO-F ☐ TRCCLK

Timer RD ☐ Use ☐ Not use
Count ☐ Up count ☐ Down count
Operation mode ☐ Timer mode ☐ Input capture function ☐ Output compare function
☐ PWM mode ☐ Reset synchronous PWM mode ☐ Complimentary PWM mode
☐ PWM3 mode
Operation Clock ☐ f1 ☐ f2 ☐ f4 ☐ f8 ☐ f32 ☐ fC2
☐ fOCO40M ☐ fOCO-F ☐ TRDCLK

Timer RE ☐ Use ☐ Not use
Operation mode ☐ Output compare mode ☐ Real-time clock mode
Operation Clock ☐ f4 ☐ f8 ☐ f32 ☐ fC4

Timer RG ☐ Use ☐ Not use
Count ☐ Up count ☐ Down count
Operation mode ☐ Timer mode ☐ Input capture function ☐ Output compare function
☐ PWM mode
Operation Clock ☐ f1 ☐ f2 ☐ f4 ☐ f8 ☐ f32 ☐ fC2
☐ fOCO40M ☐ TRGCLKA ☐ TRGCLKB

(10) On which condition will you use System clock division ratio?

ROM number	

RENESAS ELECTRONICS
SINGLE-CHIP 16-BIT MICROCOMPUTER
R5F2L388MNXXXFA
ROM PROGRAMMING CONFIRMATION FORM

(13) On which condition will you use UART?

UART0　　　　　　　　☐ Use　　　　　　　　　　☐ Not use
　Operation mode　　☐ Clock synchronous serial I/O mode　　☐ Clock non-synchronous serial I/O mode

UART1　　　　　　　　☐ Use　　　　　　　　　　☐ Not use
　Operation mode　　☐ Clock synchronous serial I/O mode　　☐ Clock non-synchronous serial I/O mode

UART2　　　　　　　　☐ Use　　　　　　　　　　☐ Not use
　Operation mode　　☐ Clock synchronous serial I/O mode　　☐ Clock non-synchronous serial I/O mode
　　　　　　　　　　　☐ I2C mode　　　　　　　　☐ Multiprocessor communication function

Synchronous Serial Communication Unit (SSU)　　　　　☐ Use　　　　☐ Not use
　Operation mode　　☐ Clock synchronous communication mode　　☐ 4 lines bus communication mode

I2C bus Interface　　☐ Use　　　　　　　　　　☐ Not use
　Operation mode　　☐ I2C bus interface mode　　☐ Clock synchronous serial mode

LIN Module　　　　　☐ Use　　　　　　　　　　☐ Not use
　　　　　　　　　　　☐ Master mode　　　　　　☐ Slave mode

(14) On which condition will you use DTC?
　　　　　　　　　　　☐ Use　　　　　　　　　　☐ Not use
Transfer mode　　　　☐ Normal mode　　　　　　☐ Repeat mode
Transfer times = _____ .

(15) On which condition will you use A/D converter?
　　　　　　　　　　　☐ Use　　　　　　　　　　☐ Not use
A/D input pin　　　　Number of A/D input pins used = _____ pins
Conversion mode　　☐ 8bit A/D　　　　　　　　☐ 10bit A/D
A/D clock source　　☐ f1　　　　　　　　　　　☐ fOCO-F
Division ratio　　　　☐ No division　　☐ In frequency/2　　☐ In frequency/4　　☐ In frequency/8
A/D Trigger　　　　　☐ Software　　☐ Timer RD　　☐ Timer RC　　☐ External Trigger
　　　　　　　　　　　☐ Not use
A/D Operation mode　☐ Single mode　　☐ Repeat mode0　　☐ Repeat mode1
　　　　　　　　　　　☐ Single sweep mode　☐ Repeat sweep mode　　Sweep pin = _____ pins
Disconnection-detection assistance　　　　☐ Use　　　　☐ Not use

(16) Will you use D/A converter?
　　　　　　　　　　　☐ Use　　　　　　　　　　☐ Not use

(17) On which condition will you use ComparatorA?
Comparator A1　　　　☐ Use　　　　　　　　　　☐ Not use
　Reference voltage　☐ Internal reference voltage　　☐ LVREF pin input voltage
　Digital Filter　　　☐ Use　　　　　　　　　　☐ Not use
Comparator A2　　　　☐ Use　　　　　　　　　　☐ Not use
　Reference voltage　☐ Internal reference voltage　　☐ LVREF pin input voltage
　Digital Filter　　　☐ Use　　　　　　　　　　☐ Not use

RENESAS ELECTRONICS
SINGLE-CHIP 16-BIT MICROCOMPUTER
R5F2L388MNXXXFA
ROM PROGRAMMING CONFIRMATION FORM

(18) On which condition will you use ComparatorB?

Comparator B1	☐ Use	☐ Not use
Digital Filter	☐ Use	☐ Not use
Comparator B3	☐ Use	☐ Not use
Digital Filter	☐ Use	☐ Not use

(19) On which condition will you use LCD Drive Control Circuit?

☐ Use   ☐ Not use

Usage of LCD pins   Number of common pins used =_____pins   Number of segment pins used =_____pins

Bias   ☐ 1/2   ☐ 1/3   ☐ 1/4

LCD panel waveform   ☐ Segment panel waveform   ☐ Dot matrix panel waveform

Usage of LCD panel   ☐ 5V faction   ☐ 3V faction   ☐ Others(   )

LCD Clock Source   ☐ f4   ☐ f32   ☐ fC-LCD

Division ratio   ☐ In frequency/1   ☐ In frequency/2   ☐ In frequency/4   ☐ In frequency/8
☐ In frequency/16   ☐ In frequency/32   ☐ In frequency/64

☐ Use External division resister

Range of LCD power supply voltage(VL4)   Min. =_____V   Max. =_____V

Division resistance   One Resister Value =_____kΩ

☐ Use Internal voltage multiplier circuit

Voltage of VL1   ☐ External input voltage =_____V   ☐ Internally-generated voltage accuracy

Capaciter for voltage multiplier   CL1-CL2 =_____F   VL4,VL3,VL2,VL1=_____F

Data display mode   ☐ Blinking display   ☐ Reversing display   ☐ Not use

Frame frequency =_____Hz

(20) On which condition will you use Watchdog Timer?

☐ Use   ☐ Not use

Count Source   ☐ CPU clock   ☐ Low-speed on-chip oscillator clock for the watchdog timer clock

Division ratio of the prescaler
☐ 1/2   ☐ 1/16   ☐ 1/128

Watchdog timer underflow period set bit
☐ 03FFh   ☐ 0FFFh   ☐ 1FFFh   ☐ 3FFFh

Watchdog timer refresh acknowledgement period set bit
☐ 25%   ☐ 50%   ☐ 75%   ☐ 100%

Watchdog timer start select bit
☐ Watchdog timer automatically starts after reset
☐ Watchdog timer is stopped after reset

Count source protection mode after reset select bit
☐ Count source protection mode enabled after reset
☐ Count source protection mode disabled after reset

Thank you for your cooperation.