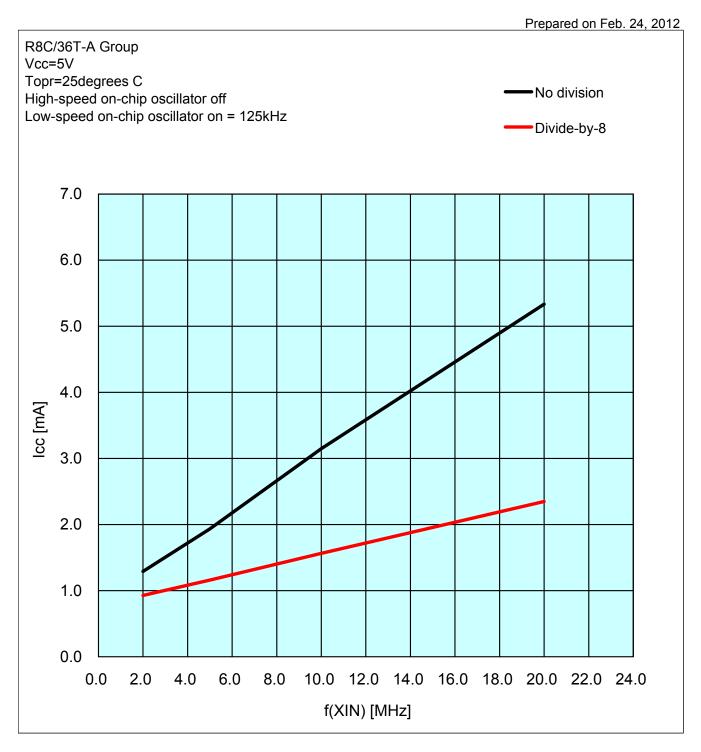
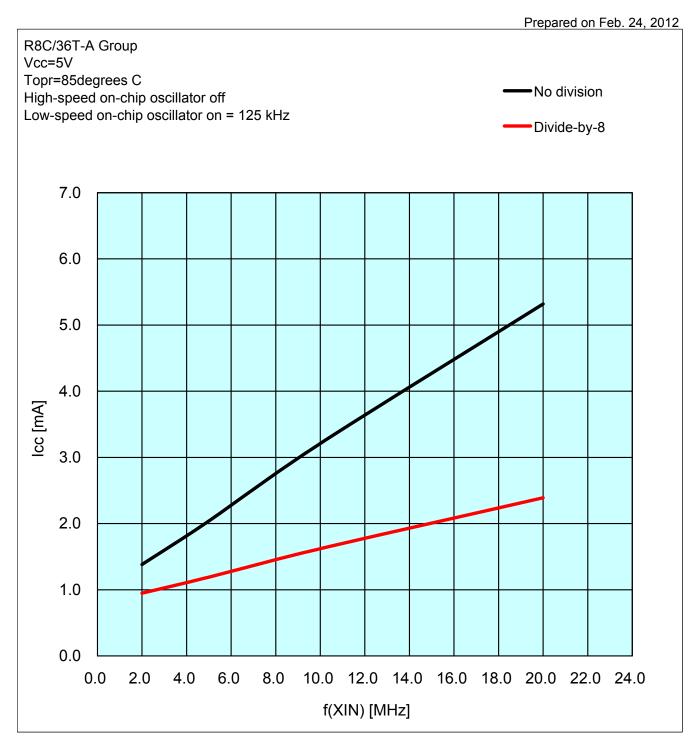
#### R8C/36T-A Group Current Consumption

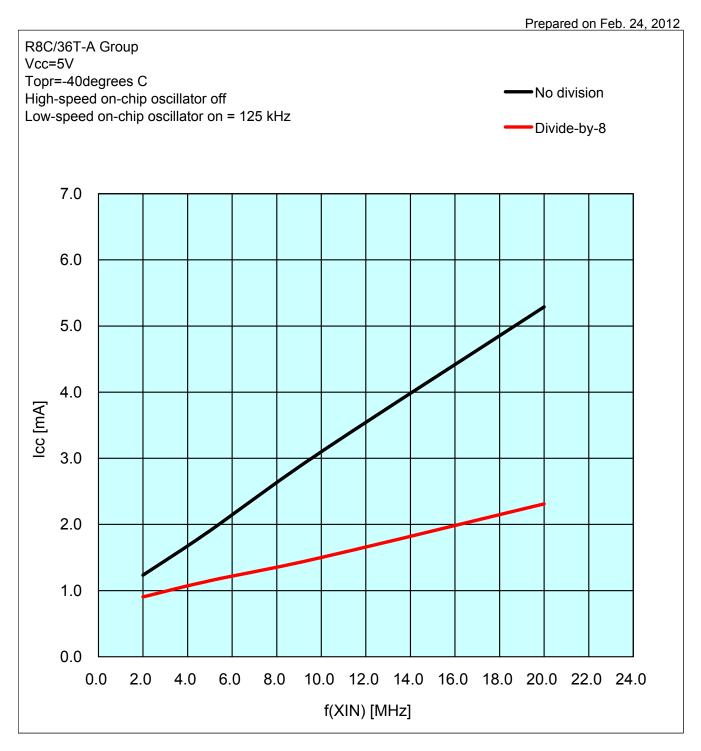
Prepared on Feb. 24, 2012

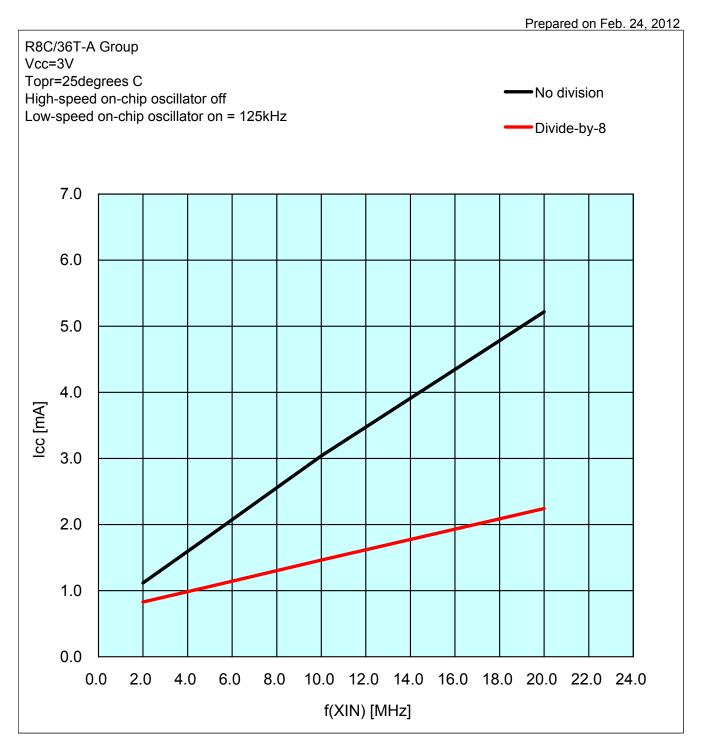
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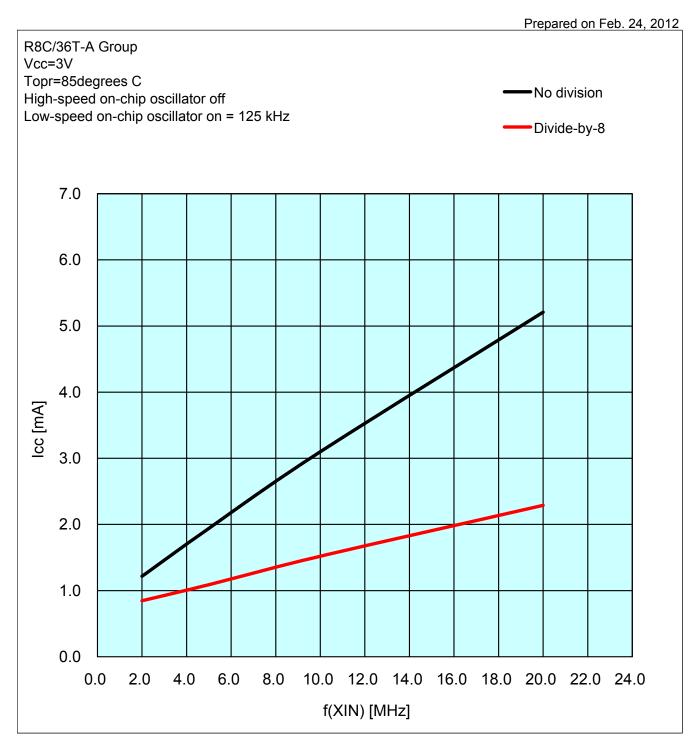
- 1 Icc VS f(XIN) (High-speed clock mode) Topr = 25 degrees C Vcc= 5V
- 2 Icc VS f(XIN) (High-speed clock mode) Topr = 85 degrees C Vcc= 5V
- 3 Icc VS f(XIN) (High-speed clock mode) Topr = -40 degrees C Vcc= 5V
- 4 Icc VS f(XIN) (High-speed clock mode) Topr = 25 degrees C Vcc= 3V
- 5 Icc VS f(XIN) (High-speed clock mode) Topr = 85 degrees C Vcc= 3V
- 6 Icc VS f(XIN) (High-speed clock mode) Topr = -40 degrees C Vcc= 3V
- 7 Icc VS f(XIN) (High-speed clock mode) Topr = 25 degrees C Vcc= 1.8V
- 8 Icc VS f(XIN) (High-speed clock mode) Topr = 85 degrees C Vcc= 1.8V
- 9 Icc VS f(XIN) (High-speed clock mode) Topr = -40 degrees C Vcc= 1.8V
- 10 Icc VS Topr (Low-speed on-chip oscillator mode)
- 11 Icc VS Topr (Stop mode)
- 12 Icc VS Topr (Low-speed on-chip oscillator wait mode) Peripheral clock operation
- 13 Icc VS Topr (Low-speed on-chip oscillator wait mode) Peripheral clock off
- 14 Icc VS Topr (Low-speed clock wait mode)
- 15 <u>Icc VS Topr (Low-speed on-chip oscillator wait mode) Peripheral clock operation TSCU=1</u>
- 16 Icc VS Topr (Low-speed on-chip oscillator wait mode) Peripheral clock off TSCU=1
- 17 Icc VS Topr (Low-speed clock wait mode) TSCU=1
- 18 Icc VS Topr (Low-speed clock mode)
- 19 Icc VS Topr (Low-speed clock mode) Program operation on RAM
- 20 Icc VS Topr (High-speed clock mode:no-division,divide-by-8) Vcc=5V
- 21 Icc VS Topr (High-speed clock mode:no-division,divide-by-8) Vcc=3V
- 22 Icc VS Topr (High-speed clock mode:no-division,divide-by-8) Vcc=1.8V
- 23 Icc VS Topr (High-speed on-chip oscillator mode) Vcc=5V
- 24 Icc VS Topr (High-speed on-chip oscillator mode) Vcc=3V
- 25 Icc VS Topr (High-speed on-chip oscillator mode) Vcc=1.8V
- 26 Icc VS Vcc (Low-speed on-chip oscillator mode)
- 27 Icc VS Vcc (Stop mode)
- 28 Icc VS Vcc (Low-speed on-chip oscillator wait mode) Peripheral clock operation
- 29 Icc VS Vcc (Low-speed on-chip oscillator wait mode) Peripheral clock off
- 30 Icc VS Vcc (Low-speed clock mode)
- 31 Icc VS Vcc (Low-speed clock mode) Program operation on RAM
- 32 Icc VS Vcc (High-speed clock mode) XIN = 20MHz No division
- 33 Icc VS Vcc (High-speed clock mode) XIN = 20MHz Divide-by-8
- 34 Icc VS Vcc (High-speed clock mode) XIN = 16MHz No division
- 35 Icc VS Vcc (High-speed clock mode) XIN = 16MHz Divide-by-8
- 36 Icc VS Vcc (High-speed clock mode) XIN = 10MHz No division
- 37 Icc VS Vcc (High-speed clock mode) XIN = 10MHz Divide-by-8
- 38 Icc VS Vcc (High-speed clock mode) XIN = 5MHz No division
- 39 Icc VS Vcc (High-speed clock mode) XIN = 5MHz Divide-by-8
- 40 Icc VS Vcc (High-speed on-chip oscillator mode) High-speed on-chip oscillator = 20MHz No division
- 41 Icc VS Vcc (High-speed on-chip oscillator mode) High-speed on-chip oscillator = 20MHz Divide-by-8
- 42 Icc VS Vcc (High-speed on-chip oscillator mode) High-speed on-chip oscillator = 10MHz No division
- 43 Icc VS Vcc (High-speed on-chip oscillator mode) High-speed on-chip oscillator = 10MHz Divide-by-8
- 44 <u>Icc VS Vcc (High-speed on-chip oscillator mode) High-speed on-chip oscillator = 5MHz No division</u>
- 45 <u>Icc VS Vcc (High-speed on-chip oscillator mode) High-speed on-chip oscillator = 5MHz Divide-by-8</u>
- 46 Icc VS Vcc (High-speed on-chip oscillator mode) High-speed on-chip oscillator = 4MHz Divide-by-16
- 47 Alcc VS AVcc

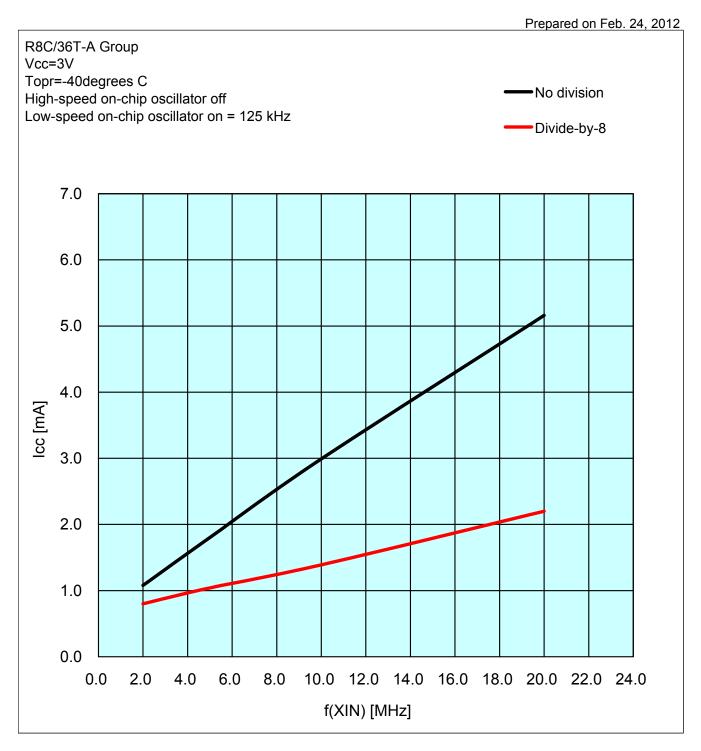


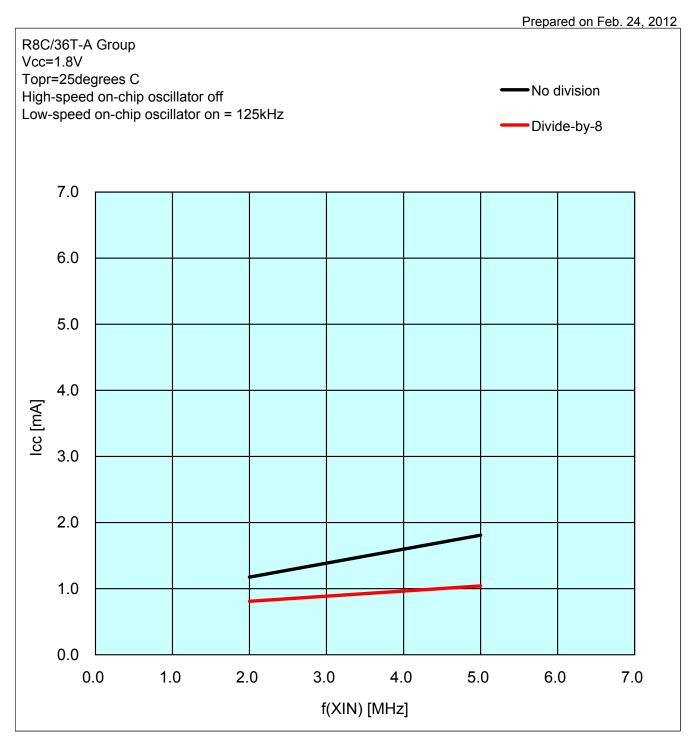


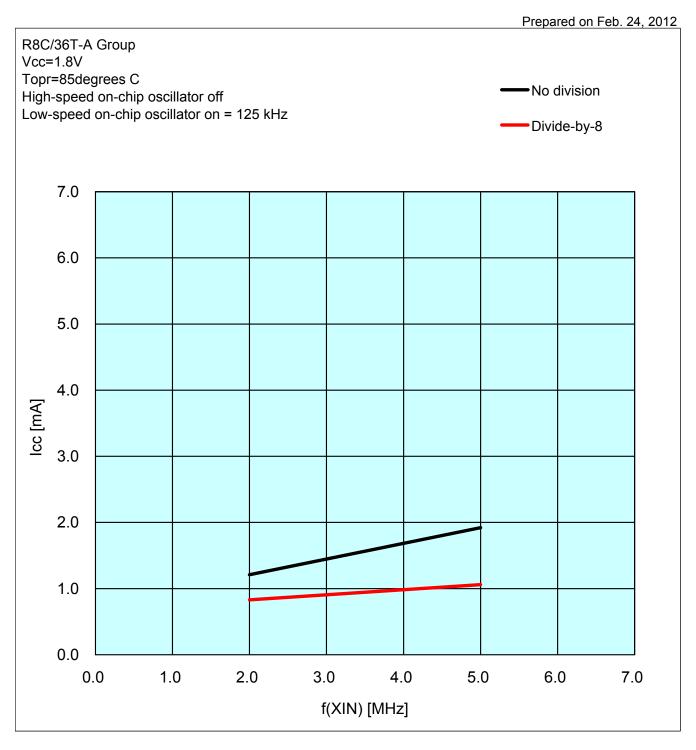


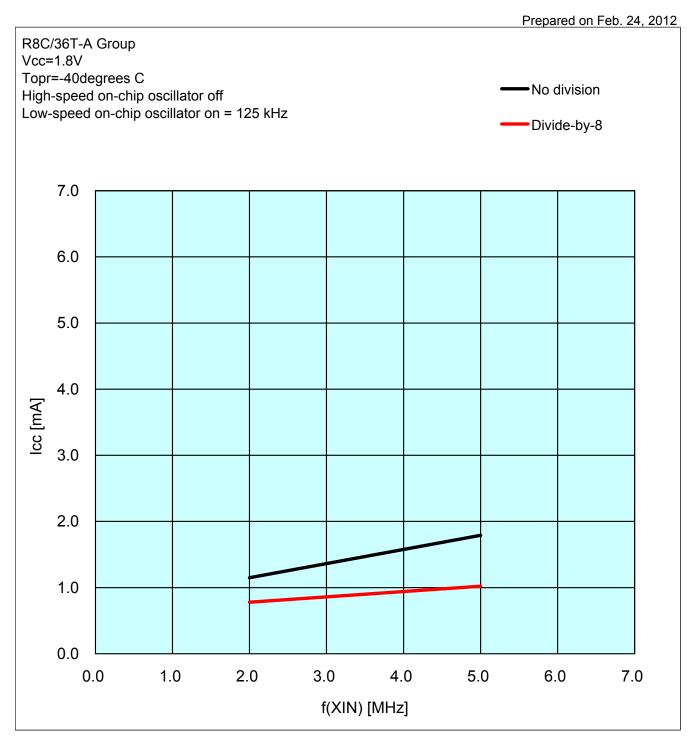




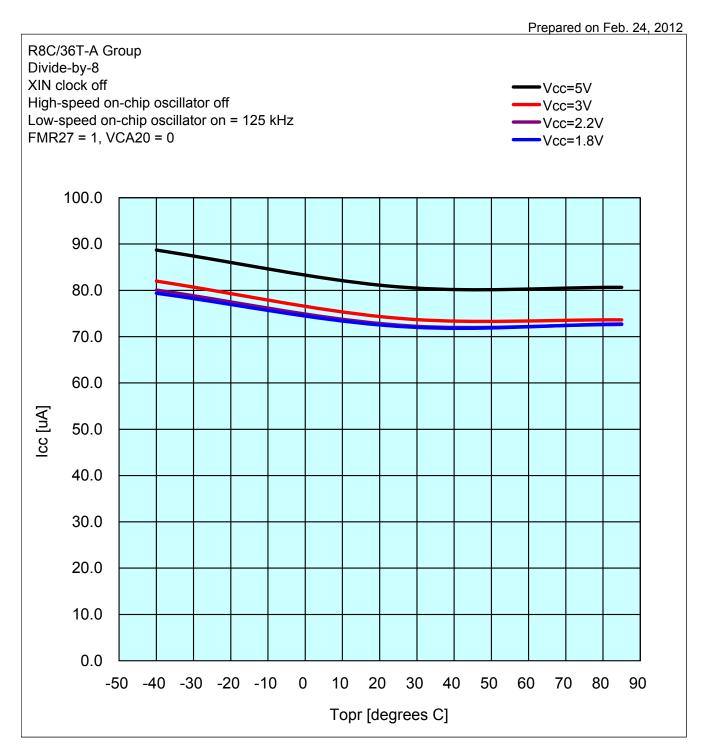




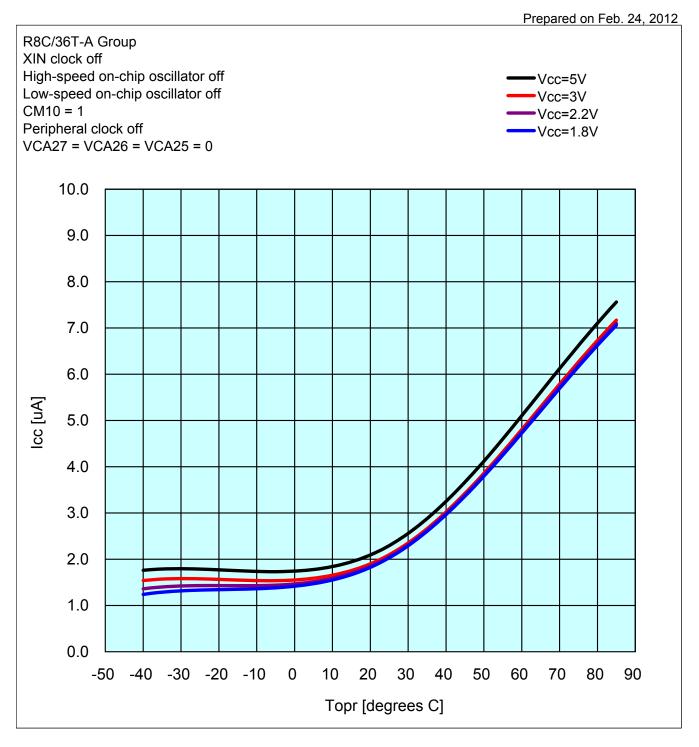




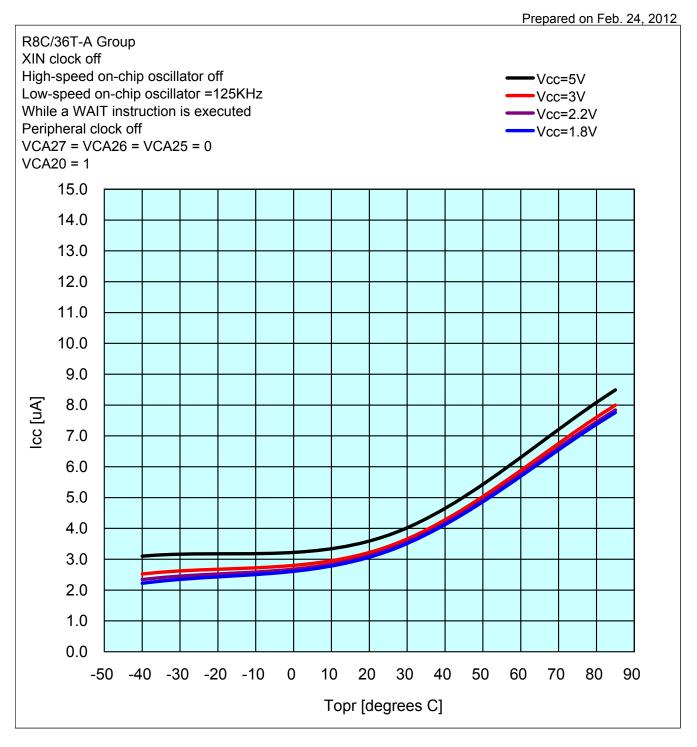
ICC VS Topr (Low-Speed On-Chip Oscillator mode)

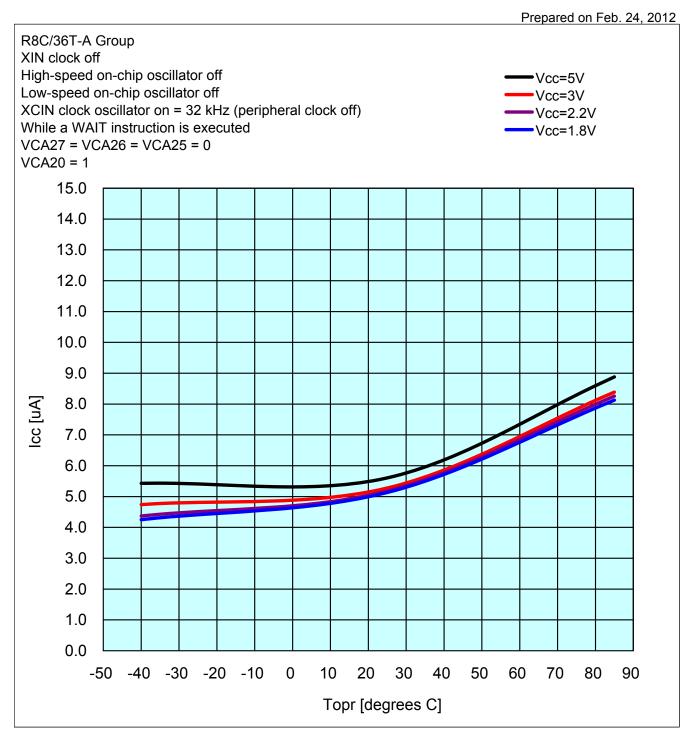


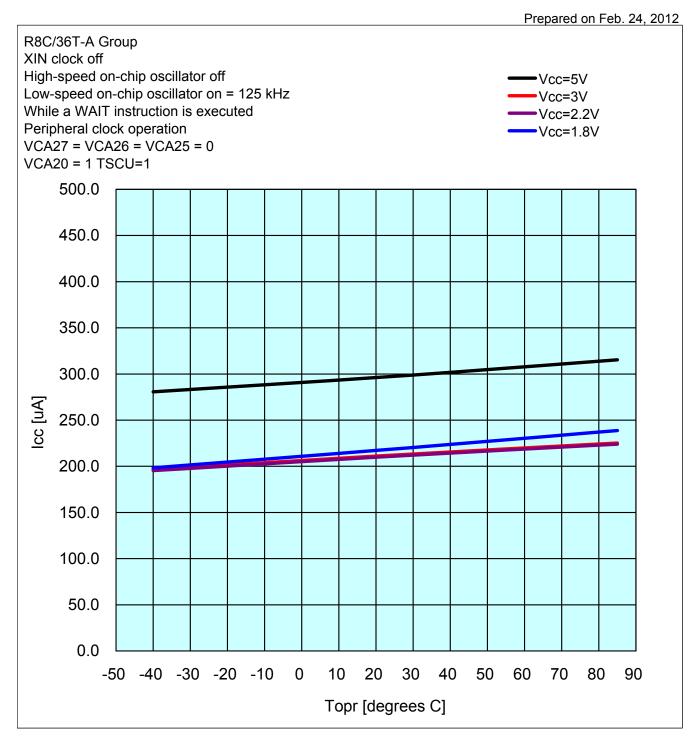
# Icc vs Topr (Stop mode)

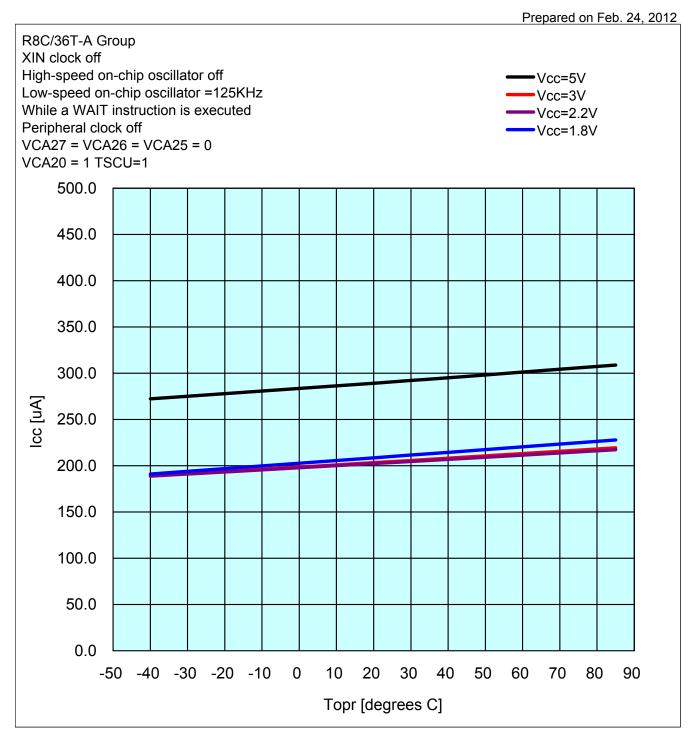


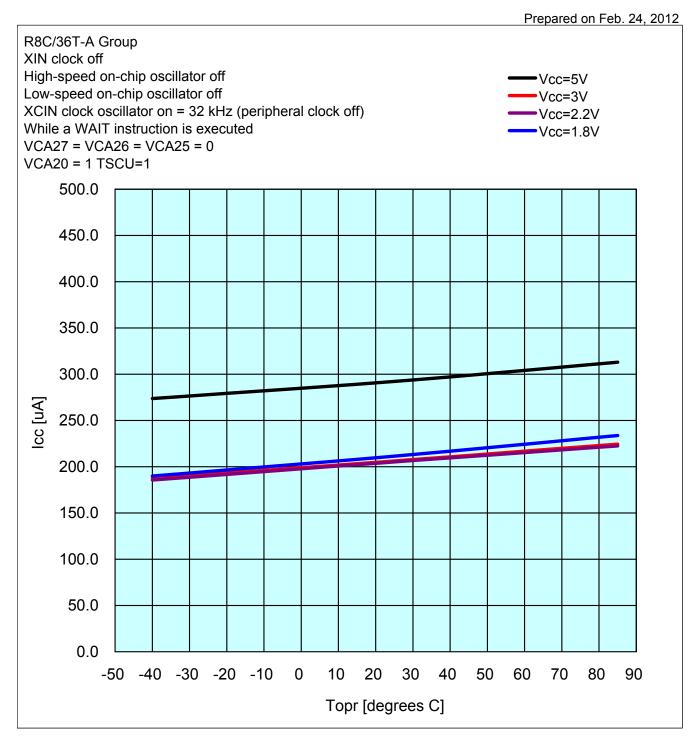
Prepared on Feb. 24, 2012 R8C/36T-A Group XIN clock off High-speed on-chip oscillator off Vcc=5V Low-speed on-chip oscillator on = 125 kHz Vcc=3V While a WAIT instruction is executed Vcc=2.2V Peripheral clock operation -Vcc=1.8V VCA27 = VCA26 = VCA25 = 0 VCA20 = 1 20.0 19.0 18.0 17.0 16.0 15.0 14.0 13.0 12.0 11.0 lcc [uA] 10.0 9.0 8.0 7.0 6.0 5.0 4.0 3.0 2.0 1.0 0.0 -50 -40 -30 -20 -10 10 20 30 40 0 50 60 70 80 90 Topr [degrees C]



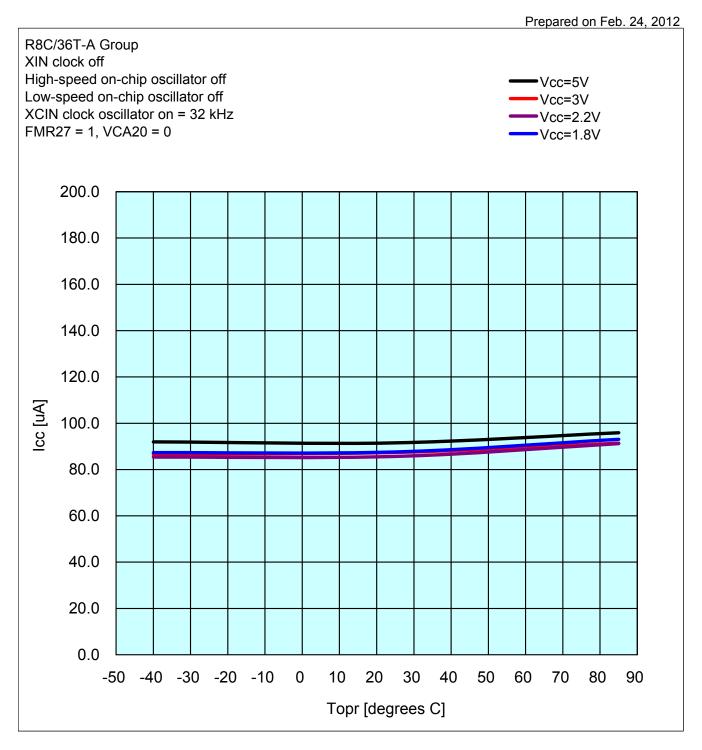




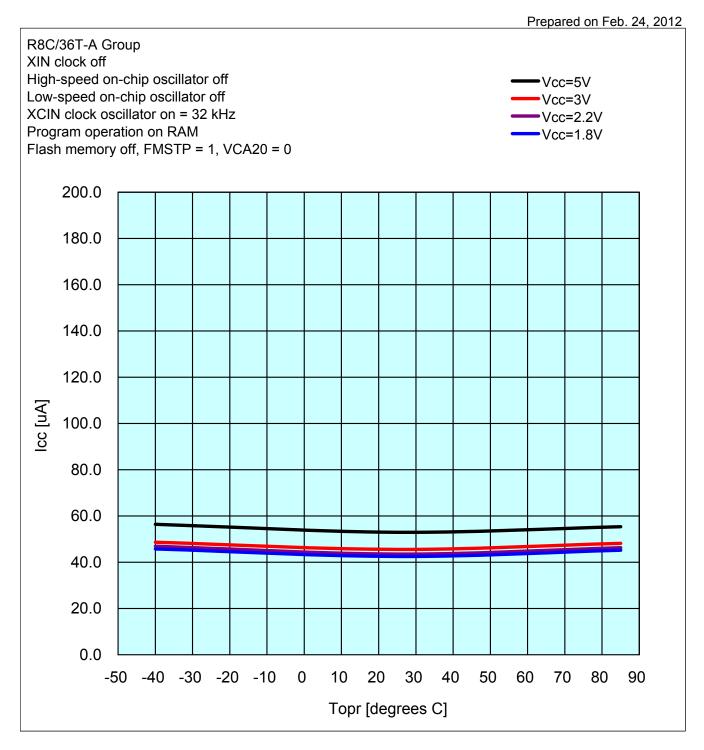




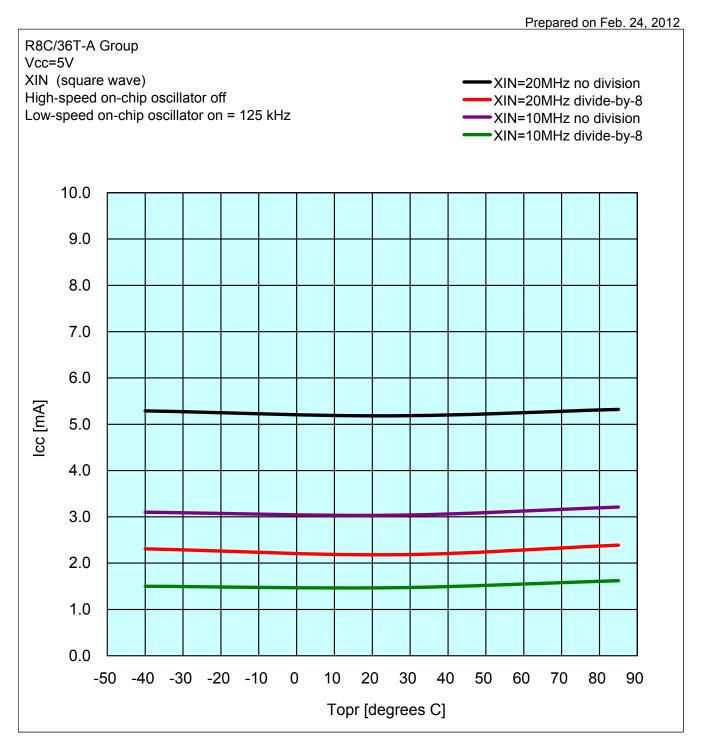
## ICC VS Topr (Low-Speed clock mode)



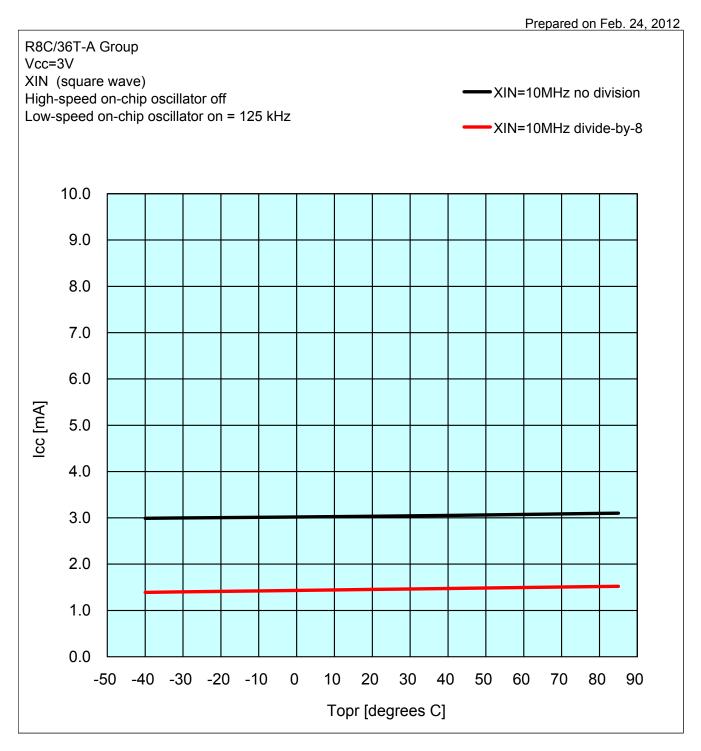
## Icc VS Topr (Low-Speed clock mode)



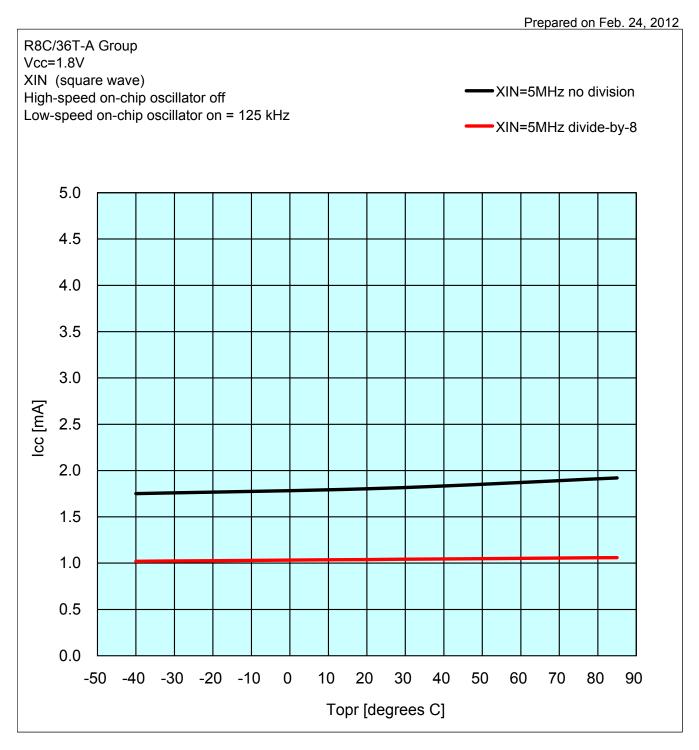
# Icc VS Topr (High-speed clock mode)



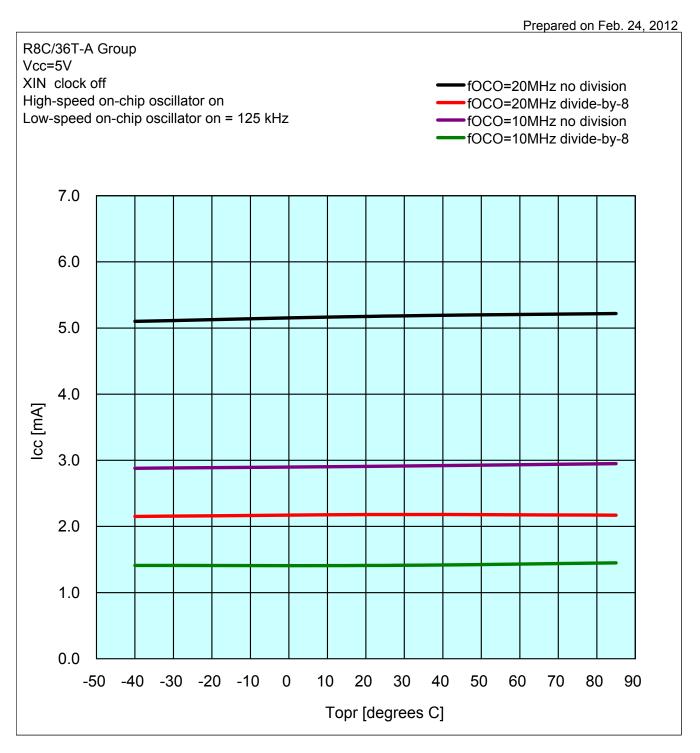
## Icc VS Topr (High-speed clock mode)



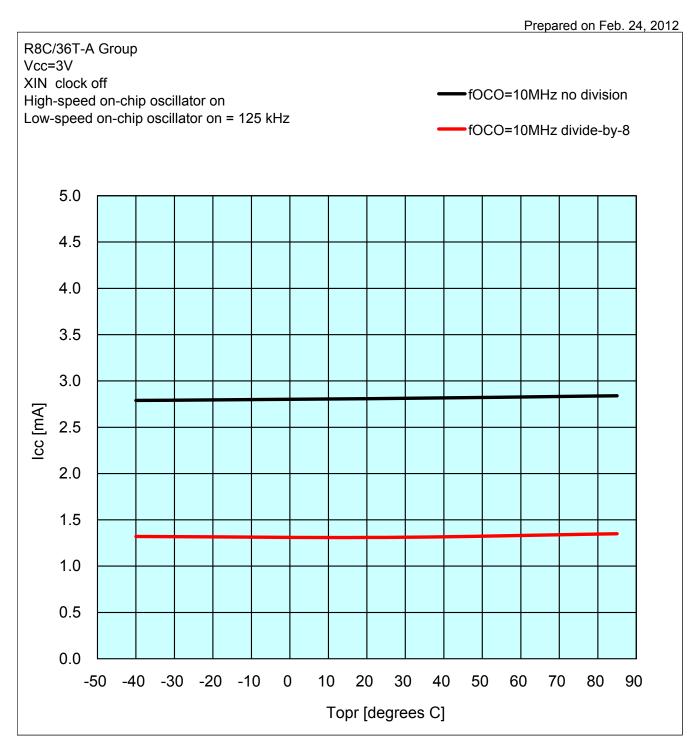
## Icc VS Topr (High-speed clock mode)



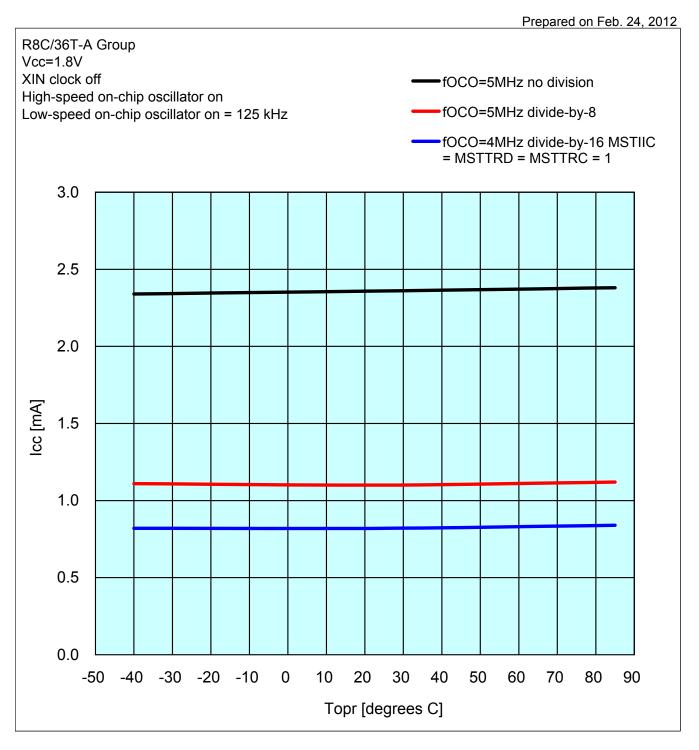
## ICC VS Topr (High-speed on-chip oscillator mode)



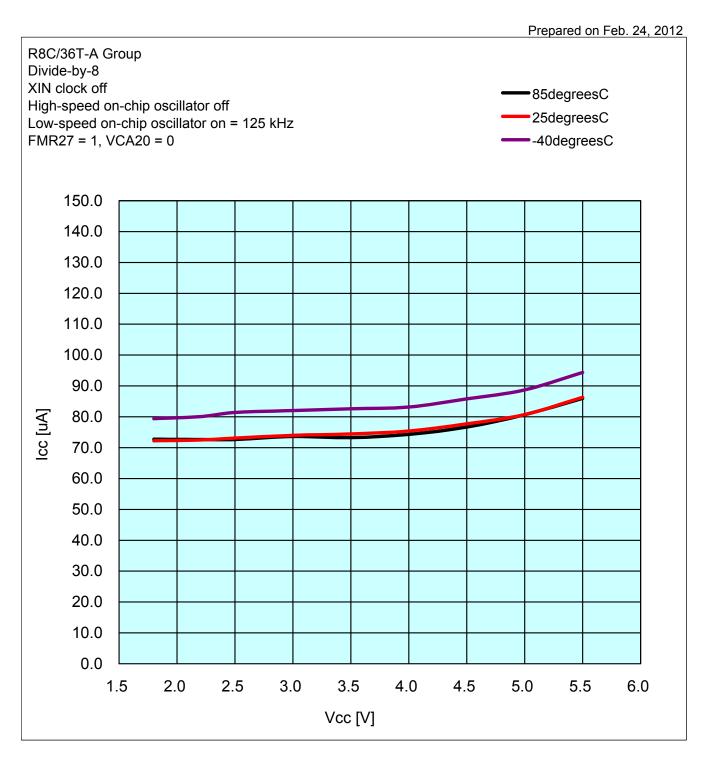
## ICC VS Topr (High-speed on-chip oscillator mode)



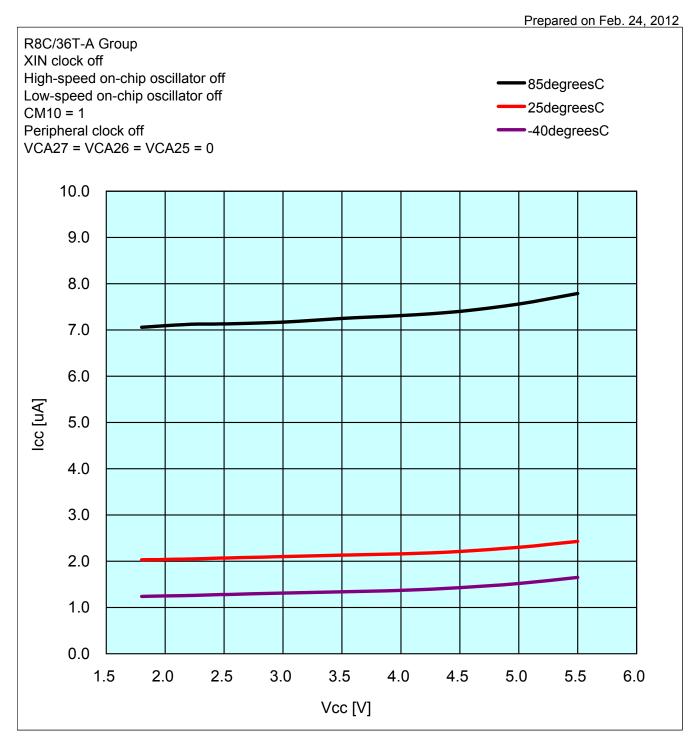
### ICC VS Topr (High-speed on-chip oscillator mode)



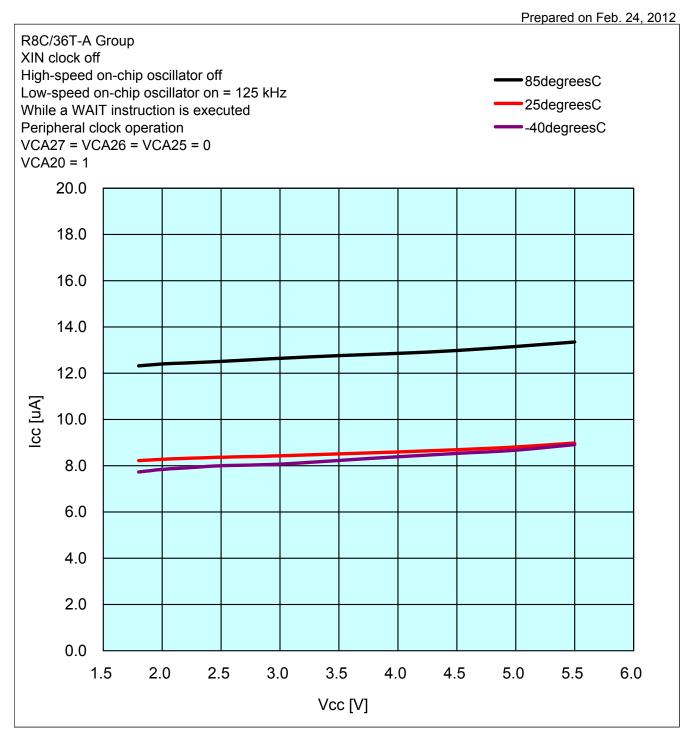
ICC VS VCC (Low-Speed On-Chip Oscillator mode)



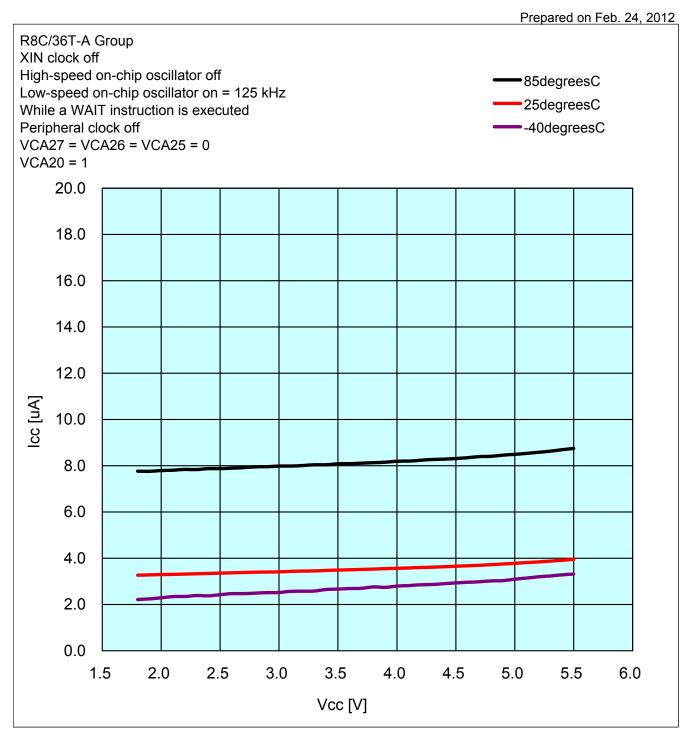
# Icc VS Vcc (Stop mode)



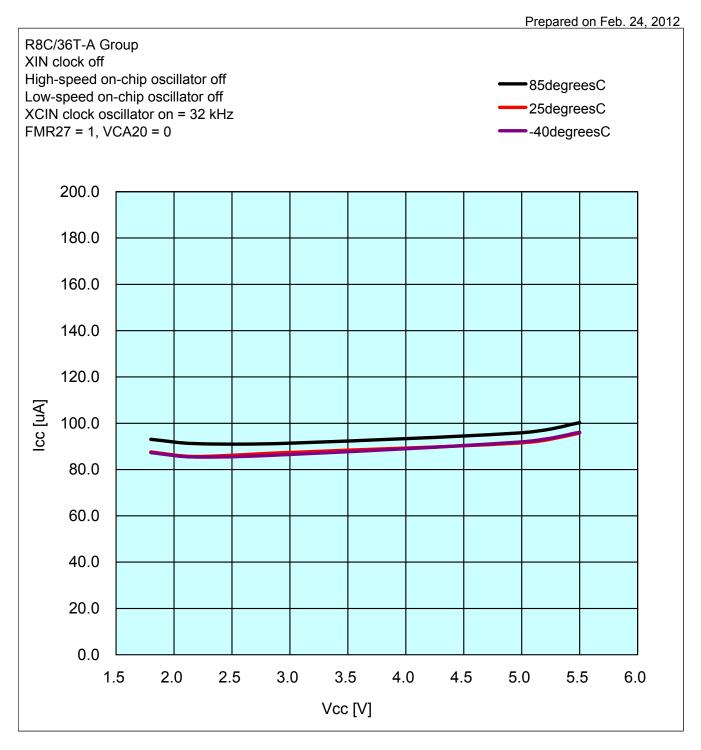
# ICC VS VCC (Wait mode)



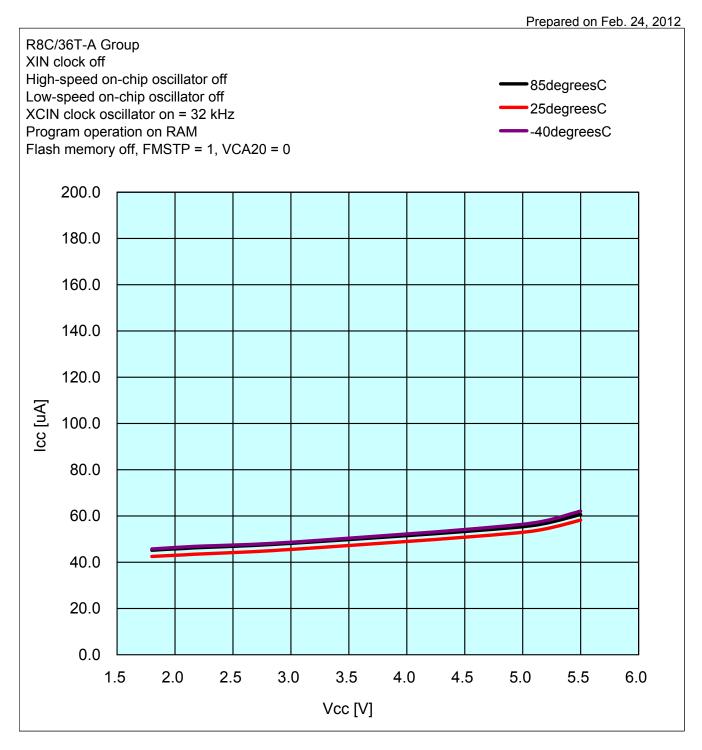
# ICC VS VCC (Wait mode)

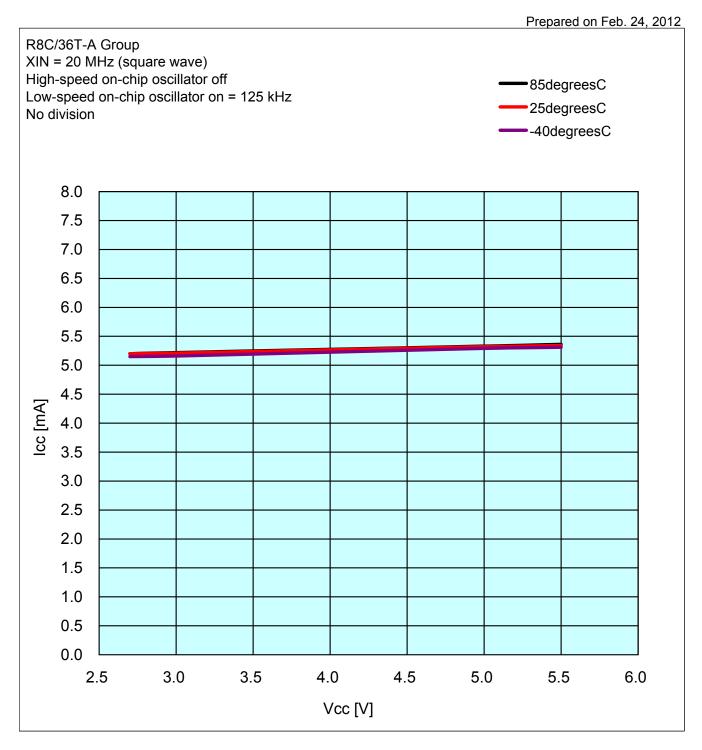


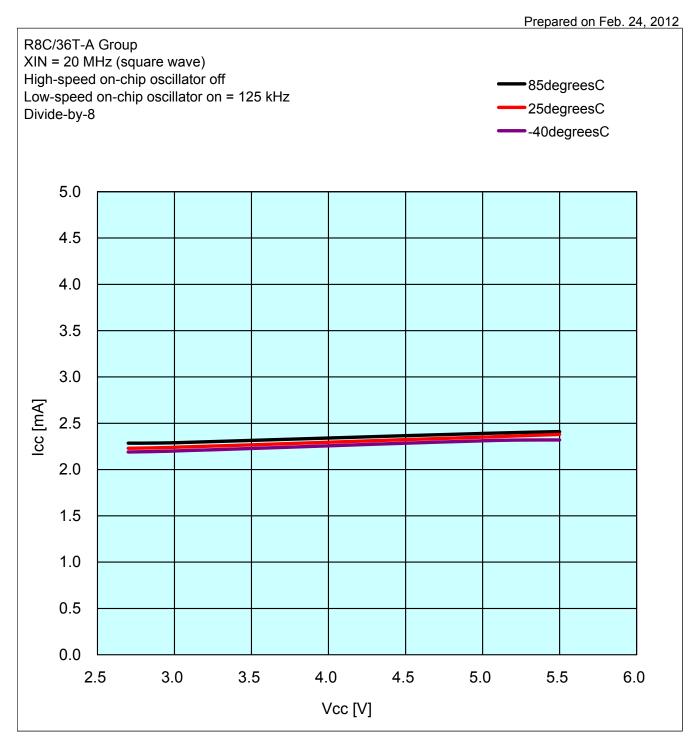
# ICC VS VCC (Low-speed clock mode)

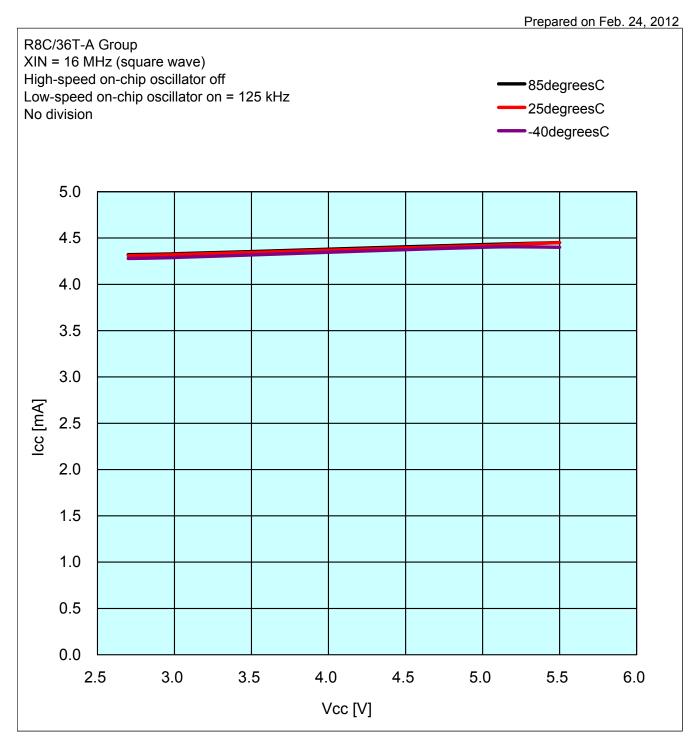


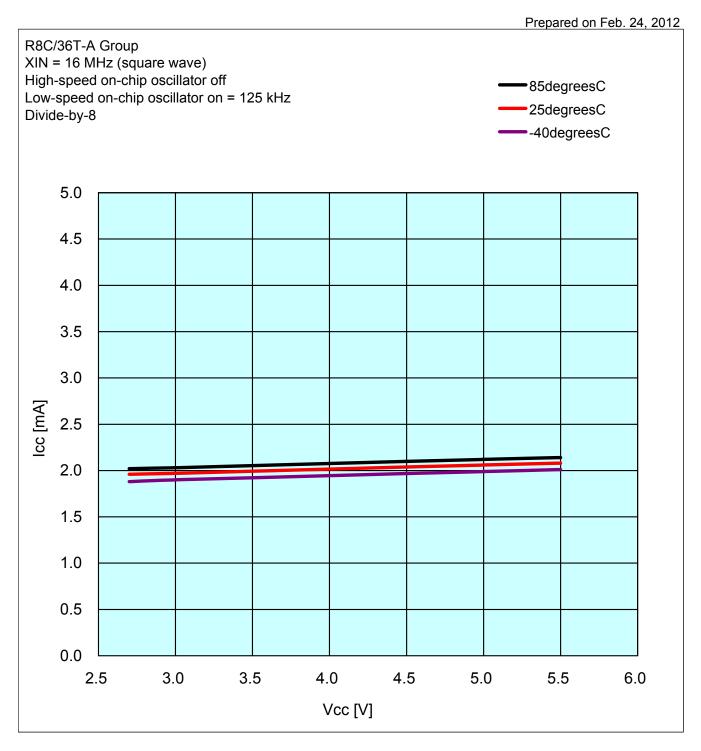
# ICC VS VCC (Low-speed clock mode)

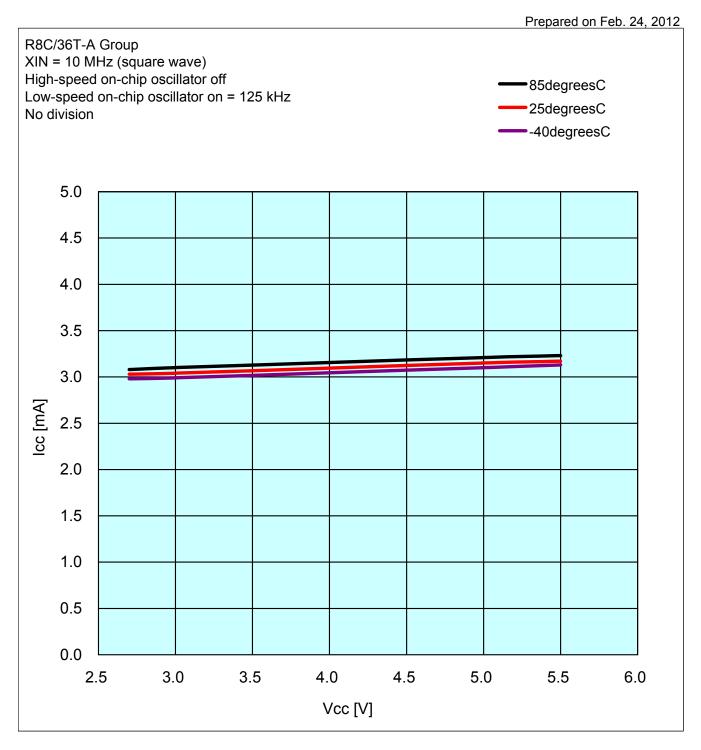


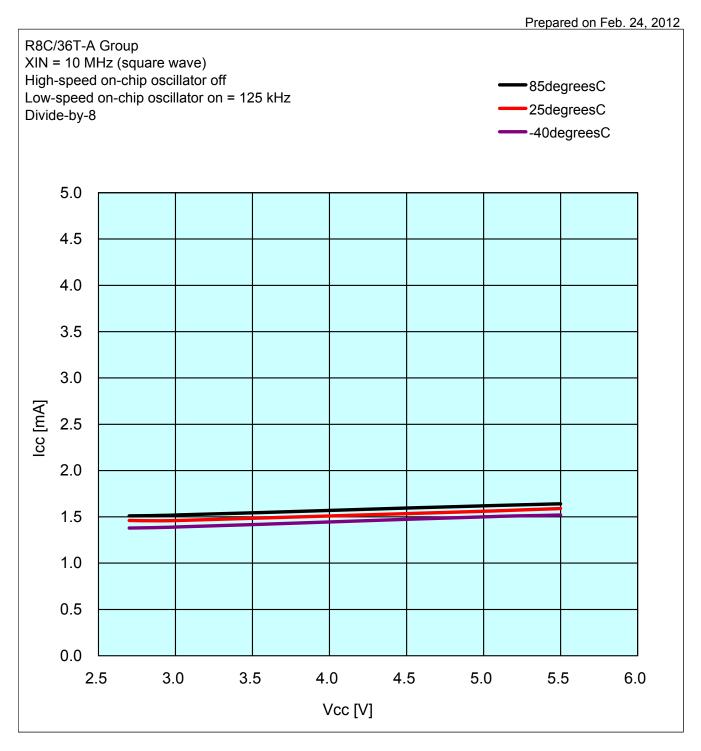


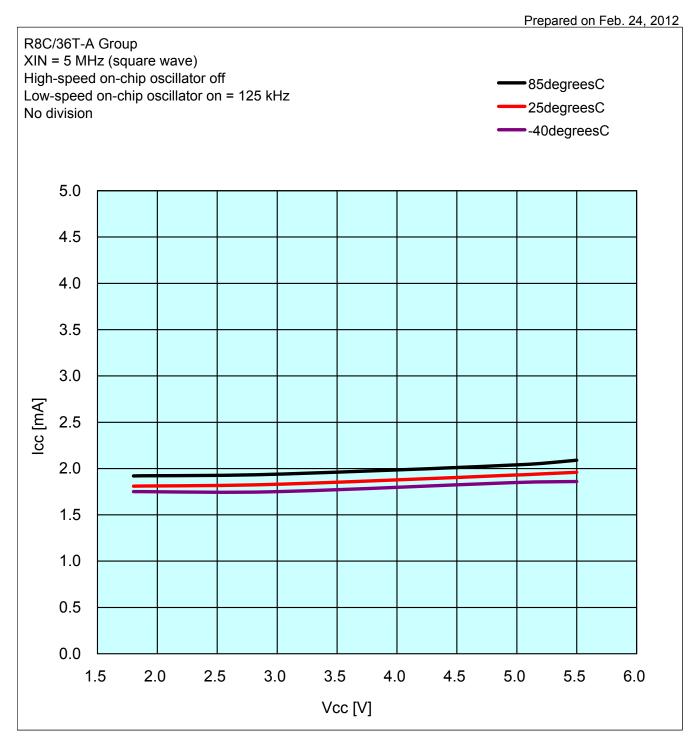


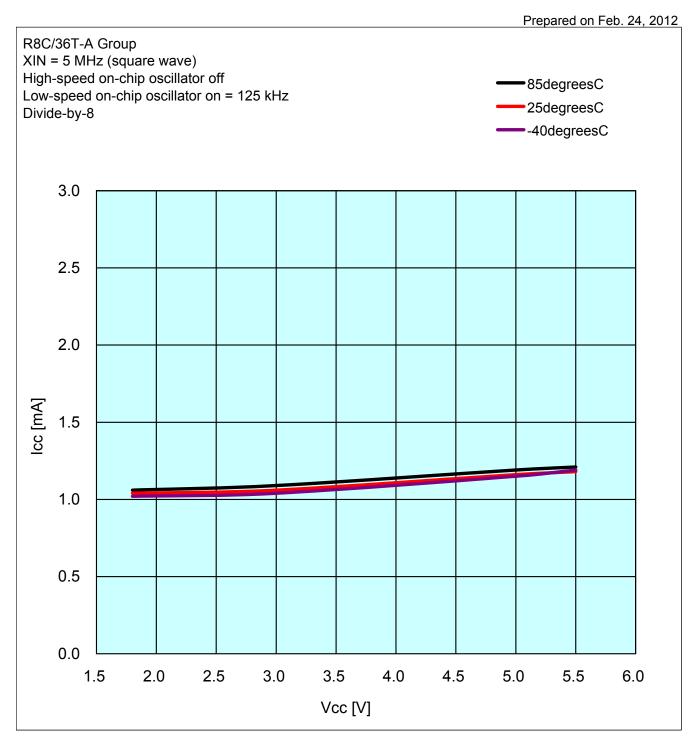


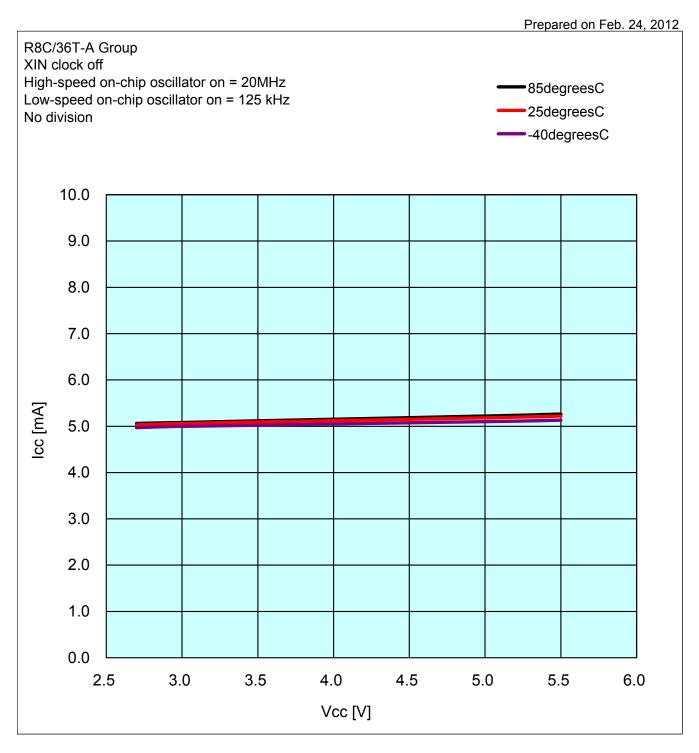


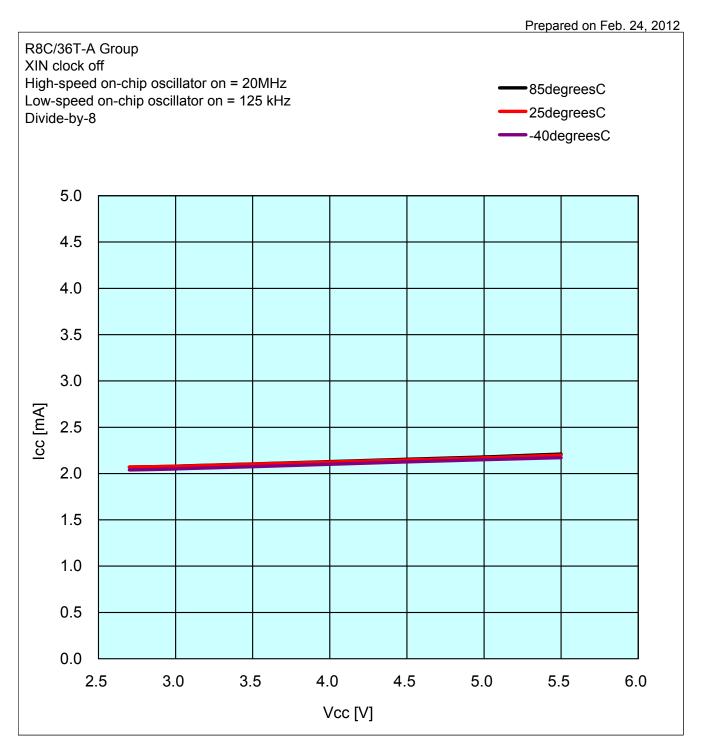


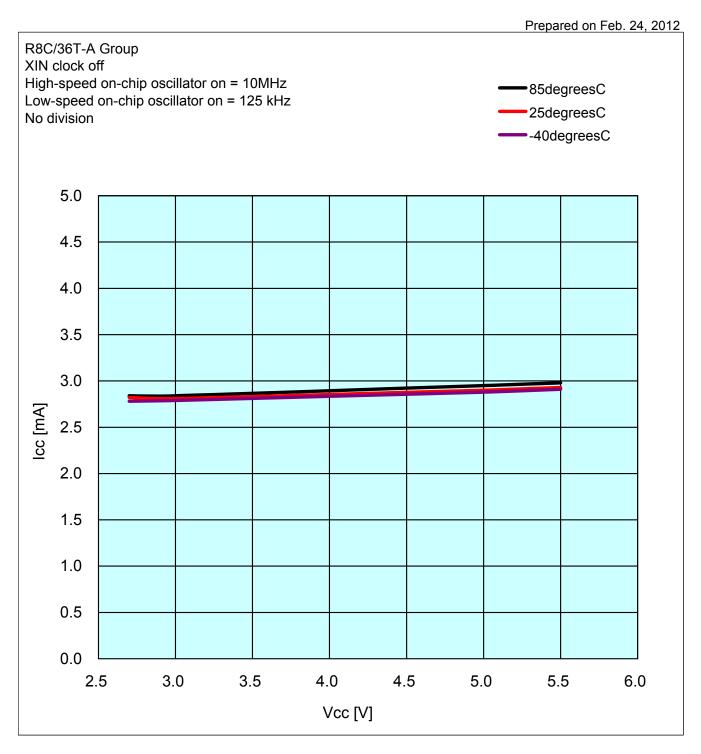


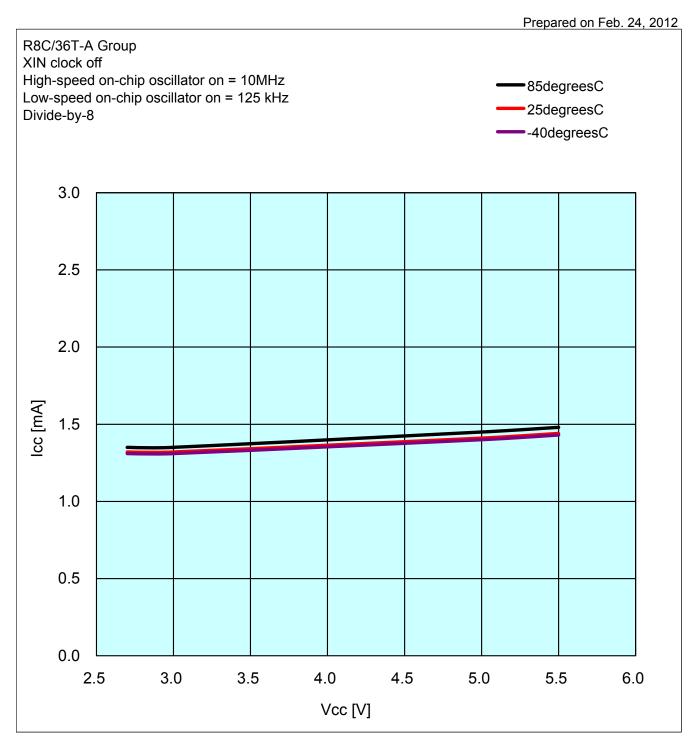


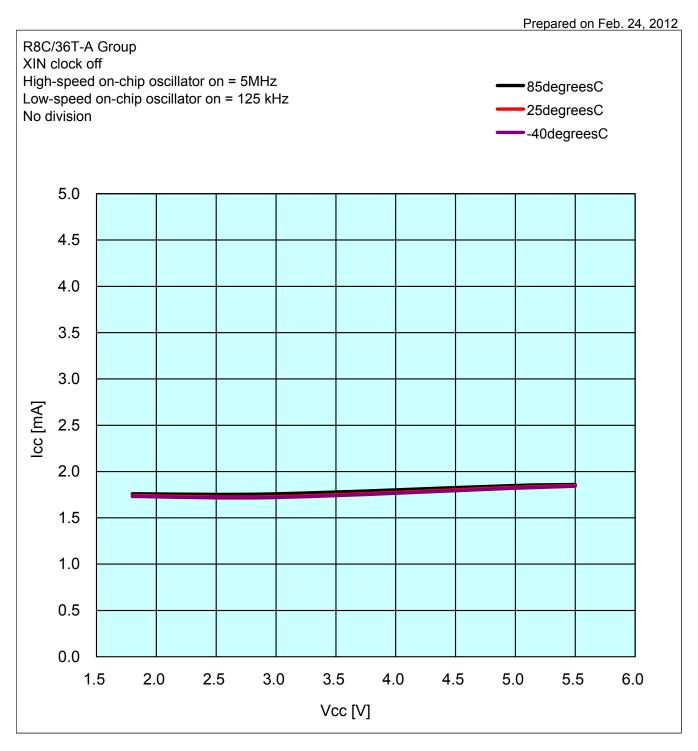


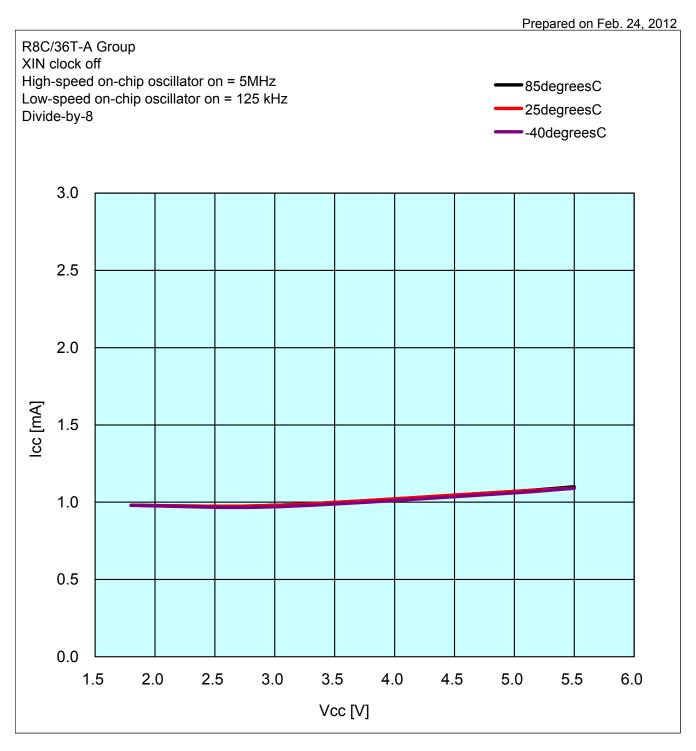


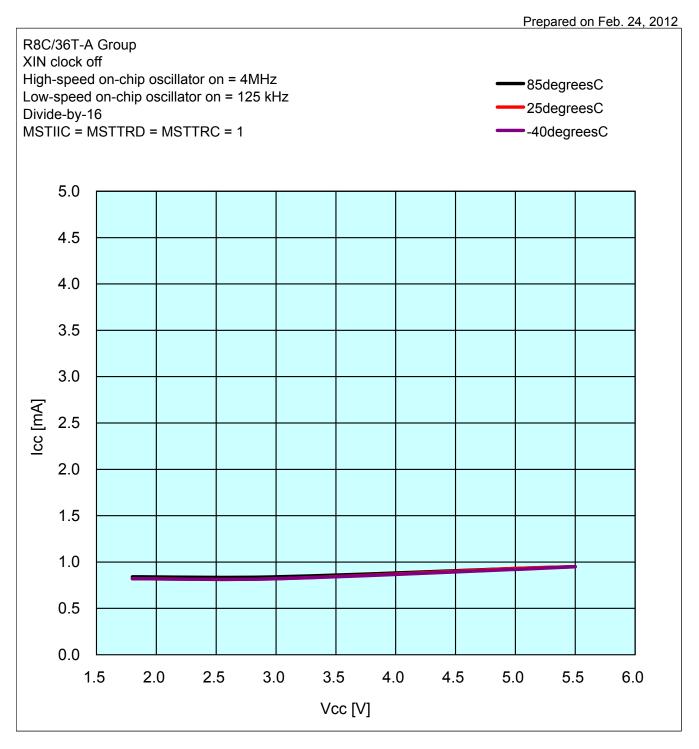












# Alcc vs AVcc

(during A/D conversion)

