Application Active Peripheral	QTY	Peripheral Base VDDREG_IDD	Total VREG SWn CORE_IDD	Peripheral Base VDDX_IDD	Total VDDX_IDD	Total VUSB3V3 IDD	Total IOH / IOL
CPU IDD	1	270 *mA*	211 *mA*[2]	---	---	---	---
ADC Module	0	0.6 *mA*	0.0 *mA*	0.5 *mA*	0.0 *mA*	---	---
Analog Comparator	0	0.5 *mA*	0.0 *mA*	0.3 *mA*	0.0 *mA*	---	---
CAN_FD	0	2.3 *mA*	0.0 *mA*	---	---	---	---
CRYPTO (HSM)	0	23 *mA*	0 *mA*	---	---	---	---
DMA	0	16 *mA* + 2 *mA* / Channel	0 *mA*	0.15 *mA*	0.00 *mA*	---	---
EBI / SMC	0	15.5 *mA*	0.0 *mA*	7.6 *mA*	0.0 *mA*	---	---
Ethernet 10/100	0	11.1 *mA*	0.0 *mA*	---	---	---	---
Ethernet GMII	0	12.2 *mA*	0.0 *mA*	10.2 *mA*	0.0 *mA*	---	---
FREQM	0	1.4 *mA*	0.0 *mA*	0.5 *mA*	0.0 *mA*	---	---
I2S	0	2.4 *mA*	0.0 *mA*	0.8 *mA*	0.0 *mA*	---	---
JTAG	0	0.01 *mA*	0.00 *mA*	---	---	---	---
MLB	0	20 *mA*	0 *mA*	0.7 *mA*	0.0 *mA*	---	---
PTC	0	1.2 *mA*	0.0 *mA*	0.9 *mA*	0.0 *mA*	---	---
RTC	0	0.03 *mA*	0.00 *mA*	---	---	---	---
SERCOM	0	6 *mA*	0 *mA*	---	---	---	---
SDHC	0	1.4 *mA*	0.0 *mA*	6.3 *mA*	0.0 *mA*	---	---
SQI	0	4.6 *mA*	0.0 *mA*	---	---	---	---
SWD	0	0.01 *mA*	0.00 *mA*	---	---	---	---
TCC	0	2.1 *mA*	0.0 *mA*	0.5 *mA*	0.0 *mA*	---	---
Trace	0	0.01 *mA*	0.00 *mA*	---	---	---	---
TRNG	0	0.05 *mA*	0.00 *mA*	---	---	---	---
WDT	0	0.02 *mA*	0.00 *mA*	---	---	---	---
I/O pins[1]	---	---	---	---	---	---	IOL = 0.0 *mA* IOH = 0.0 *mA*
USB	0	0 *mA*	---	0.5 *mA*	0.0 *mA*	0.0 *mA*	---
PLL	1	15 *mA*	---	---	---	---	---
SRAM	1	44 *mA*	---	---	---	---	---
SUB TOTAL	---	---	211.0 *mA*	---	0.0 *mA*	0.0 *mA*	---
SUM TOTAL	---	270.0 *mA*		---	0.0 *mA*	0.0 *mA*	---

NOTES:

1. This needs only to be an estimate of application total IOL sinking current & IOH sourcing current.
2. This value represents only VREG_SWn, (i.e., CORE_IDD) however the CPU IDDREG spec, (i.e., 270 mA), in the datasheet represents CPU @ 300MHz +SRAM+PLL enabled. For purposes of ensuring VREG_SWn, (i.e., CORE_IDD) load does not exceed 341 mA therefore: VALUE = (CPU IDDREG – (SRAM + PLL)) = (270mA - (44 mA+15 mA)) = 211 mA
3. VDDX = (VDDIO, AVDD, VUSB3V3) = 3.3 v, VDDREG = 1.8 v
4. Package is 208-Pin TFBGA ,(θ_{JA} = 23.7 °C/W), PD_{MAX} = 1.69 W
5. Rating: Industrial (-40°C ≤ Ta ≤ 85°C) Application max operating environment temperature: 85 °C

$P_{INTERNAL}$ = 486.0 ***mW*** *Requirement Satisfied (<1.69W)*

VREG_SWn CORE_IDD = 211.0 *mA* *Requirement Satisfied (<341mA)*

Application within Safe Power Conditions