











$$I_{O(OUT)} = \frac{\left(K_{(SET)} \times V_{(SET)}\right)}{R_{(SET)}}$$

PARAMETER		TEST CONDITIONS		MIN	TYP	MAX	UNIT
V <sub>(SET)</sub>	Output current set voltage	Voltage on ISET pin, $V_{CC} \ge 4.5 \text{ V}$ , $V_{IN} \ge 4.5 \text{ V}$ , $V_{I(BAT)} > V_{(LOWV)}$ , $V_{IN} - V_{I(BAT)} > V_{(DO-MAX)}$ , $V_{O(REG)} = 4.2 \text{ V}$	bq24010, bq24012, bq24013, bq24014	2.45	2.50	2.55	V
		(Ext) (ES MOS) S(NES)	bq24018	2.548	2.6	2.652	V
K <sub>(SET)</sub>	Output current ISET factor	$50 \text{ mA} \le I_{O(OUT)} \le 1000 \text{ mA}, V_{(LOWV)} < V_{(OUT)}$	-) < V <sub>(RCH)</sub>	315	335	355	
		$25 \text{ mA} \le I_{O(OUT)} < 50 \text{ mA}, V_{(LOWV)} < V_{(OUT)} < V_{(RCH)}$		315	372	430	
		$10 \text{ mA} \le I_{O(OUT)} < 100 \text{ mA}, V_{(OUT)} < V_{(LOWV)}$		350		1000	
		$2.5 \text{ mA} \le I_{O(OUT)} < 10 \text{ mA}, V_{(OUT)} < V_{(LOWV)}$			450		
		$2.5 \text{ mA} \le I_{O(OUT)} < I_{(PGM)}, V_{(OUT)} < V_{(RCH)}$		355 <sup>(3)</sup>			

sudo-junkie Sheet: File: BATTERY\_MANAGEMENT\_BQ24012.kicad\_sch

Title: Atego Nano

Size: A4 Date: 2023-06-28 KiCad E.D.A. kicad (7.0.0) Rev: 1.1 ld: 5/7



