

Name	Value	Unit							
Enabled PF C	7f	hex							
Enabled PF D	30	hex							
Configuration									
Charging Configuration	00	hex							
Temperature Enable	06	hex							
Temperature Mode	00	hex							
DA Configuration	0014	hex							
Cell Configuration	06	hex							
FET Options	0100	hex							
Sbs Gauging Configuration	04	hex							
Sbs Configuration	20	hex							
Auth Config	00	hex							
Power Config	0003	hex							
IO Config	00	hex							
Pin Configuration	0183	hex							
Pin Configuration									
Flag	Bit 7	Bit 6							
Flag	Bit 5	Bit 4							
Flag	Bit 3	Bit 2							
Flag	Bit 1	Bit 0							
Flag	MSB	MFP20_SEL2	MFP20_SEL1	MFP20_SEL0	MFP17_SEL2	MFP17_SEL1	MFP17_SEL0	MFP16_SEL1	MFP16_SEL0
Flag	LSB	MFP15_SEL1	MFP15_SEL0	MFP13_SEL2	MFP13_SEL1	MFP13_SEL0	MFP12_SEL2	MFP12_SEL1	MFP12_SEL0
Flag	Write to Data Memory								
FlagMapSetUp0	0000	hex							

Pin configuration :

- PIN 20, 21 and 22 = LED pins
- Pin 17 = System Present Pin
- Pin 16 = Pre-discharge (PDSG)
- **Pin 15 = GPIO PIN**
- Pin 13 = Led Button
- Pin 12 = GPIO PIN

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Temperature Mode	00	hex							
DA Configuration	0014	hex							
FlagMapSetUp0									
Flag	Bit 7	Bit 6							
Flag	Bit 5	Bit 4							
Flag	Bit 3	Bit 2							
Flag	Bit 1	Bit 0							
Flag	MSB	FLAG_EN	RSVD	FLAG_OD	FLAG_OR	FLAG_GPIO2	FLAG_GPIO1	FLAG_GPIO0	FLAG_POL
Flag	LSB	FLAG_BIT3	FLAG_BIT2	FLAG_BIT1	FLAG_BIT0	FLAG_REG3	FLAG_REG2	FLAG_REG1	FLAG_REG0
Flag	Write to Data Memory								
FlagMapSetUp0	8841	hex							
FlagMapSetUp1	8041	hex							
FlagMapSetUp2	0000	hex							

- FlagMapSetUp0 = 0x 8841

Configure the control register to map BatteryStatus()[FD].

- Set FlagMapSetUp0[FLAG_EN] = 1 to enable the control.
- Set FlagMapSetUp0[FLAG_REG2:0] = 0x01 for BatteryStatus().
- Set FlagMapSetUp0[FLAG_BIT4:0] = 0x04 for BatteryStatus()[FD].
- Set FlagMapSetUp0[FLAG_POL:0] = 0 for no change in the polarity of the flag.
- Set FlagMapSetUp0[FLAG_GPIO2:0] = 0x04 for the Pin 15 (RH2 pin).
- Set FlagMapSetUp0[FLAG_OR] = 0 for the AND operation.
- Set FlagMapSetUp0[FLAG_OD] = 0 for driven-high/driven low

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Configuration									
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Temperature Enable	06	hex							
Temperature Mode	00	hex							
DA Configuration	0014	hex							
Cell Configuration	06	hex							
FlagMapSetUp1									
Flag	Bit 7	Bit 6							
Flag	Bit 5	Bit 4							
Flag	Bit 3	Bit 2							
Flag	Bit 1	Bit 0							
Flag	MSB	FLAG_EN	RSVD	FLAG_OD	FLAG_OR	FLAG_GPIO2	FLAG_GPIO1	FLAG_GPIO0	FLAG_POL
Flag	LSB	FLAG_BIT3	FLAG_BIT2	FLAG_BIT1	FLAG_BIT0	FLAG_REG3	FLAG_REG2	FLAG_REG1	FLAG_REG0
Flag	Write to Data Memory								
FlagMapSetUp0	0000	hex							
FlagMapSetUp1	8041	hex							
FlagMapSetUp2	0000	hex							

- FlagMapSetUp1 = 0x 8041

Configure the control register to map BatteryStatus()[FD] with the PIN12

Battery Management Studio (bqStudio) 1.3.86

File View AutoCycle Window Help

Registers Data Memory Commands Calibration SHA Authentication Advanced Comm SMB ECC Authentication Chemistry Firmware

GPCPackager Watch Data Graph Errors

Registers Data Memory

Registers

Start Log Scan Refresh

Name	Value	Units	Name	Value	Units	Name	Value	Units	Name	Value	Units
<input checked="" type="checkbox"/> Manufacturer Access	0x0187	hex	<input type="checkbox"/> Cell 3 Current	0	mA	<input type="checkbox"/> Cell 4 RaScale	1000	-	<input type="checkbox"/> Cell 2 QMax	2950	mAh
<input checked="" type="checkbox"/> Remaining Cap. Alarm	590	mAh	<input type="checkbox"/> Cell 4 Current	0	mA	<input type="checkbox"/> Cell 5 RaScale	1000	-	<input type="checkbox"/> Cell 3 QMax	2950	mAh
<input checked="" type="checkbox"/> Remaining Time Alarm	10	min	<input type="checkbox"/> Cell 5 Current	0	mA	<input type="checkbox"/> Cell 6 RaScale	1000	-	<input type="checkbox"/> Cell 4 QMax	2950	mAh
<input checked="" type="checkbox"/> At Rate	0	mA	<input type="checkbox"/> Cell 6 Current	0	mA	<input type="checkbox"/> Cell 7 RaScale	0	-	<input type="checkbox"/> Cell 5 QMax	2950	mAh
<input type="checkbox"/> At Rate Time To Full	65535	min	<input type="checkbox"/> Cell 7 Current	0	mA	<input type="checkbox"/> Cell 1 CompRes	0	mOhm	<input type="checkbox"/> Cell 6 QMax	2950	mAh
<input type="checkbox"/> At Rate Time To Empty	65535	min	<input type="checkbox"/> Cell 1 Power	0	cW	<input type="checkbox"/> Cell 2 CompRes	0	mOhm	<input type="checkbox"/> Cell 7 QMax	0	mAh
<input type="checkbox"/> At Rate OK	1	-	<input type="checkbox"/> Cell 2 Power	0	cW	<input type="checkbox"/> Cell 3 CompRes	0	mOhm	<input type="checkbox"/> Cell 1 QMax DOD0	0	-
<input type="checkbox"/> Temperature	26.0	degC	<input type="checkbox"/> Cell 3 Power	0	cW	<input type="checkbox"/> Cell 4 CompRes	0	mOhm	<input type="checkbox"/> Cell 2 QMax DOD0	0	-
<input type="checkbox"/> Voltage	24086	mV	<input type="checkbox"/> Cell 4 Power	0	cW	<input type="checkbox"/> Cell 5 CompRes	0	mOhm	<input type="checkbox"/> Cell 3 QMax DOD0	0	-

Bit Registers

Bit High Bit Low RSVD

Name	Value	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
<input checked="" type="checkbox"/> Battery Mode (high)	0x6081	CapM	ChgM	AM	RSVD	RSVD	RSVD	PB	CC
Battery Mode (low)		CF	RSVD	RSVD	RSVD	RSVD	RSVD	PBS	ICC
<input type="checkbox"/> Battery Status (high)	0x02C0	OCA	TCA	RSVD	OTA	TDA	RSVD	RCA	RTA
Battery Status (low)		INIT	DSG	FC	FD	EC3	EC2	EC1	EC0
<input type="checkbox"/> Operation Status A (high)	0x0187	SLEEP	XCHG	XDSG	PF	SS	SDV	SEC1	SEC0
Operation Status A (low)		BTP_INIT	RSVD	FUSE	PDSG	PCHG	CHG	DSG	PRES
<input type="checkbox"/> Operation Status B (high)	0x0000	IATA_CTERM	PSSHUT	EMSHUT	CB	SLPCC	SLPAD	SMBLCAL	INIT
Operation Status B (low)		SLEEPM	XL	CAL_OFFSET	CAL	AUTOCALM	AUTH	LED	SDM
<input type="checkbox"/> Temp Range (high)	0x10	RSVD	RSVD	RSVD	RSVD	RSVD	RSVD	RSVD	RSVD
Temp Range (low)		RSVD	OT	HT	STH	RT	STL	LT	UT
<input type="checkbox"/> Charolno Status (high)	0x0008	RSVD	RSVD	RSVD	RSVD	NCT	CCC	CVR	CCR

TEXAS INSTRUMENTS Scanning: (100%)

FD bit = 0 but Pin 15 is always to 1,5V.