

* Texas Instruments Data Flash File
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 * Device Number 7694
 * Firmware Version 0.36
 * Build Number 39
 * Order Number 0
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 * bqz Device Number 7692
 * bqz Firmware Version 0.36
 * bqz Build Number 39
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Class name	Subclass name	Parameter name	Parameter Value	Display Units
Calibration	Voltage	Cell 1 Gain	12119	â€”
Calibration	Voltage	Cell 2 Gain	12119	â€”
Calibration	Voltage	Cell 3 Gain	12119	â€”
Calibration	Voltage	Cell 4 Gain	12119	â€”
Calibration	Voltage	Cell 5 Gain	12121	â€”
Calibration	Voltage	Cell 6 Gain	12121	â€”
Calibration	Voltage	Cell 7 Gain	12121	â€”
Calibration	Voltage	Cell 8 Gain	12121	â€”
Calibration	Voltage	Cell 9 Gain	12123	â€”
Calibration	Voltage	Cell 10 Gain	12123	â€”
Calibration	Voltage	Pack Gain	34225	â€”
Calibration	Voltage	TOS Gain	34172	â€”
Calibration	Voltage	LD Gain	34322	â€”
Calibration	Voltage	ADC Gain	4039	â€”
Calibration	Current	CC Gain	1	mÎ©
Calibration	Current	Capacity Gain	1	mÎ©
Calibration	Vcell Offset	Vcell Offset	0	mV
Calibration	V Divider Offset	Vdiv Offset	0	userV
Calibration	Current Offset	Coulomb Counter Offset Samples	64	â€”
Calibration	Current Offset	Board Offset	0	â€”
Calibration	Temperature	Internal Temp Offset	0	Â°C

Calibration	Temperature	CFETOFF Temp Offset	0	Â°C
Calibration	Temperature	DFETOFF Temp Offset	0	Â°C
Calibration	Temperature	ALERT Temp Offset	0	Â°C
Calibration	Temperature	TS1 Temp Offset	0	Â°C
Calibration	Temperature	TS2 Temp Offset	0	Â°C
Calibration	Temperature	TS3 Temp Offset	0	Â°C
Calibration	Temperature	HDQ Temp Offset	0	Â°C
Calibration	Temperature	DCHG Temp Offset	0	Â°C
Calibration	Temperature	DDSG Temp Offset	0	Â°C
Calibration	Internal Temp Model	Int Gain	25390	â€”
Calibration	Internal Temp Model	Int base offset	3032	â€”
Calibration	Internal Temp Model	Int Maximum AD	16383	â€”
Calibration	Internal Temp Model	Int Maximum Temp	6379	0.1K
Calibration	18K Temperature Model	Coeff a1	-15524	â€”
Calibration	18K Temperature Model	Coeff a2	26423	â€”
Calibration	18K Temperature Model	Coeff a3	-22664	â€”
Calibration	18K Temperature Model	Coeff a4	28834	â€”
Calibration	18K Temperature Model	Coeff a5	672	â€”
Calibration	18K Temperature Model	Coeff b1	-371	â€”
Calibration	18K Temperature Model	Coeff b2	708	â€”
Calibration	18K Temperature Model	Coeff b3	-3498	â€”
Calibration	18K Temperature Model	Coeff b4	5051	â€”
Calibration	18K Temperature Model	Adc0	11703	â€”
Calibration	180K Temperature Model	Coeff a1	-17513	â€”
Calibration	180K Temperature Model	Coeff a2	25759	â€”
Calibration	180K Temperature Model	Coeff a3	-23593	â€”
Calibration	180K Temperature Model	Coeff a4	32175	â€”
Calibration	180K Temperature Model	Coeff a5	2090	â€”
Calibration	180K Temperature Model	Coeff b1	-2055	â€”
Calibration	180K Temperature Model	Coeff b2	2955	â€”
Calibration	180K Temperature Model	Coeff b3	-3427	â€”
Calibration	180K Temperature Model	Coeff b4	4385	â€”
Calibration	180K Temperature Model	Adc0	17246	â€”
Calibration	Custom Temperature Model	Coeff a1	0	â€”

Calibration	Custom Temperature Model	Coeff a2	0	â€”
Calibration	Custom Temperature Model	Coeff a3	0	â€”
Calibration	Custom Temperature Model	Coeff a4	0	â€”
Calibration	Custom Temperature Model	Coeff a5	0	â€”
Calibration	Custom Temperature Model	Coeff b1	0	â€”
Calibration	Custom Temperature Model	Coeff b2	0	â€”
Calibration	Custom Temperature Model	Coeff b3	0	â€”
Calibration	Custom Temperature Model	Coeff b4	0	â€”
Calibration	Custom Temperature Model	Rc0	0	â€”
Calibration	Custom Temperature Model	Adc0	0	â€”
Calibration	Current Deadband	Coulomb Counter Deadband	9	234nV
Calibration	CUV	CUV Threshold Override	ffff	Hex
Calibration	COV	COV Threshold Override	ffff	Hex
Settings	Fuse	Min Blow Fuse Voltage	5000	mV
Settings	Fuse	Fuse Blow Timeout	30	s
Settings	Configuration	Power Config	2982	Hex
Settings	Configuration	REG12 Config	0	Hex
Settings	Configuration	REG0 Config	0	Hex
Settings	Configuration	HWD Regulator Options	0	Hex
Settings	Configuration	Comm Type	0	â€”
Settings	Configuration	I2C Address	0	â€”
Settings	Configuration	SPI Configuration	20	â€”
Settings	Configuration	Comm Idle Time	0	s
Settings	Configuration	CFETOFF Pin Config	0	Hex
Settings	Configuration	DFETOFF Pin Config	0	Hex
Settings	Configuration	ALERT Pin Config	0	Hex
Settings	Configuration	TS1 Config	7	Hex
Settings	Configuration	TS2 Config	0	Hex
Settings	Configuration	TS3 Config	0	Hex
Settings	Configuration	HDQ Pin Config	0	Hex
Settings	Configuration	DCHG Pin Config	0	Hex
Settings	Configuration	DDSG Pin Config	0	Hex
Settings	Configuration	DA Configuration	5	Hex
Settings	Configuration	Vcell Mode	0	Hex

Settings	Configuration	CC3 Samples	80	Num
Settings	Protection	Protection Configuration	2	Hex
Settings	Protection	Enabled Protections A	8c	Hex
Settings	Protection	Enabled Protections B	0	Hex
Settings	Protection	Enabled Protections C	0	Hex
Settings	Protection	CHG FET Protections A	98	Hex
Settings	Protection	CHG FET Protections B	d5	Hex
Settings	Protection	CHG FET Protections C	56	Hex
Settings	Protection	DSG FET Protections A	e4	Hex
Settings	Protection	DSG FET Protections B	e6	Hex
Settings	Protection	DSG FET Protections C	e2	Hex
Settings	Protection	Body Diode Threshold	50	mA
Settings	Alarm	Default Alarm Mask	f800	Hex
Settings	Alarm	SF Alert Mask A	fc	Hex
Settings	Alarm	SF Alert Mask B	f7	Hex
Settings	Alarm	SF Alert Mask C	f4	Hex
Settings	Alarm	PF Alert Mask A	5f	Hex
Settings	Alarm	PF Alert Mask B	9f	Hex
Settings	Alarm	PF Alert Mask C	0	Hex
Settings	Alarm	PF Alert Mask D	0	Hex
Settings	Permanent Failure	Enabled PF A	0	Hex
Settings	Permanent Failure	Enabled PF B	0	Hex
Settings	Permanent Failure	Enabled PF C	7	Hex
Settings	Permanent Failure	Enabled PF D	0	Hex
Settings	FET	FET Options	0d	Hex
Settings	FET	Chg Pump Control	1	Hex
Settings	FET	Precharge Start Voltage	0	mV
Settings	FET	Precharge Stop Voltage	0	mV
Settings	FET	Predischarge Timeout	5	10ms
Settings	FET	Predischarge Stop Delta	500	mV
Settings	Current Thresholds	Dsg Current Threshold	100	userA
Settings	Current Thresholds	Chg Current Threshold	50	userA
Settings	Cell Open-Wire	Check Time	5	s
Settings	Interconnect Resistances	Cell 1 Interconnect	0	mΩ

Settings	Interconnect Resistances	Cell 2 Interconnect	0	mÎ©
Settings	Interconnect Resistances	Cell 3 Interconnect	0	mÎ©
Settings	Interconnect Resistances	Cell 4 Interconnect	0	mÎ©
Settings	Interconnect Resistances	Cell 5 Interconnect	0	mÎ©
Settings	Interconnect Resistances	Cell 6 Interconnect	0	mÎ©
Settings	Interconnect Resistances	Cell 7 Interconnect	0	mÎ©
Settings	Interconnect Resistances	Cell 8 Interconnect	0	mÎ©
Settings	Interconnect Resistances	Cell 9 Interconnect	0	mÎ©
Settings	Interconnect Resistances	Cell 10 Interconnect	0	mÎ©
Settings	Manufacturing	Mfg Status Init	50	Hex
Settings	Cell Balancing Config	Balancing Configuration	0	Hex
Settings	Cell Balancing Config	Min Cell Temp	-20	Â°C
Settings	Cell Balancing Config	Max Cell Temp	60	Â°C
Settings	Cell Balancing Config	Max Internal Temp	70	Â°C
Settings	Cell Balancing Config	Cell Balance Interval	20	s
Settings	Cell Balancing Config	Cell Balance Max Cells	1	Num
Settings	Cell Balancing Config	Cell Balance Min Cell V (Charge)	3900	mV
Settings	Cell Balancing Config	Cell Balance Min Delta (Charge)	40	mV
Settings	Cell Balancing Config	Cell Balance Stop Delta (Charge)	20	mV
Settings	Cell Balancing Config	Cell Balance Min Cell V (Relax)	3900	mV
Settings	Cell Balancing Config	Cell Balance Min Delta (Relax)	40	mV
Settings	Cell Balancing Config	Cell Balance Stop Delta (Relax)	20	mV
Power	Shutdown	Shutdown Cell Voltage	0	mV
Power	Shutdown	Shutdown Stack Voltage	6000	mV
Power	Shutdown	Low V Shutdown Delay	1	s
Power	Shutdown	Shutdown Temperature	85	Â°C
Power	Shutdown	Shutdown Temperature Delay	5	s
Power	Shutdown	FET Off Delay	0	0.25s
Power	Shutdown	Shutdown Command Delay	0	0.25s
Power	Shutdown	Auto Shutdown Time	0	min
Power	Shutdown	RAM Fail Shutdown Time	5	s
Power	Sleep	Sleep Current	20	mA
Power	Sleep	Voltage Time	5	s
Power	Sleep	Wake Comparator Current	500	mA

Power	Sleep	Sleep Hysteresis Time	10	s
Power	Sleep	Sleep Charger Voltage Threshold	20000	mV
Power	Sleep	Sleep Charger PACK-TOS Delta	2000	mV
System Data	Integrity	Config RAM Signature	0	Hex
Protections	CUV	Threshold	50	50.6mV
Protections	CUV	Delay	74	3.3 ms
Protections	CUV	Recovery Hysteresis	2	50.6mV
Protections	COV	Threshold	86	50.6mV
Protections	COV	Delay	74	3.3 ms
Protections	COV	Recovery Hysteresis	2	50.6mV
Protections	COVL	Latch Limit	0	â€”
Protections	COVL	Counter Dec Delay	10	s
Protections	COVL	Recovery Time	15	s
Protections	OCC	Threshold	4	mV
Protections	OCC	Delay	4	3.3 ms
Protections	OCC	Recovery Threshold	-200	mA
Protections	OCC	PACK-TOS Delta	2000	mV
Protections	OCD1	Threshold	8	mV
Protections	OCD1	Delay	1	3.3 ms
Protections	OCD2	Threshold	6	mV
Protections	OCD2	Delay	7	3.3 ms
Protections	SCD	Threshold	0	â€”
Protections	SCD	Delay	15	Âµs
Protections	SCD	Recovery Time	5	s
Protections	OCD3	Threshold	-4000	userA
Protections	OCD3	Delay	2	s
Protections	OCD	Recovery Threshold	200	mA
Protections	OCDL	Latch Limit	0	â€”
Protections	OCDL	Counter Dec Delay	10	s
Protections	OCDL	Recovery Time	15	s
Protections	OCDL	Recovery Threshold	200	mA
Protections	SCDL	Latch Limit	0	â€”
Protections	SCDL	Counter Dec Delay	10	s
Protections	SCDL	Recovery Time	15	s

Protections	SCDL	Recovery Threshold	200	mA
Protections	OTC	Threshold	55	Â°C
Protections	OTC	Delay	2	s
Protections	OTC	Recovery	50	Â°C
Protections	OTD	Threshold	60	Â°C
Protections	OTD	Delay	2	s
Protections	OTD	Recovery	55	Â°C
Protections	OTF	Threshold	80	Â°C
Protections	OTF	Delay	2	s
Protections	OTF	Recovery	65	Â°C
Protections	OTINT	Threshold	85	Â°C
Protections	OTINT	Delay	2	s
Protections	OTINT	Recovery	80	Â°C
Protections	UTC	Threshold	0	Â°C
Protections	UTC	Delay	2	s
Protections	UTC	Recovery	5	Â°C
Protections	UTD	Threshold	0	Â°C
Protections	UTD	Delay	2	s
Protections	UTD	Recovery	5	Â°C
Protections	UTINT	Threshold	-20	Â°C
Protections	UTINT	Delay	2	s
Protections	UTINT	Recovery	-15	Â°C
Protections	Recovery	Time	3	s
Protections	HWD	Delay	60	s
Protections	Load Detect	Active Time	0	s
Protections	Load Detect	Retry Delay	50	s
Protections	Load Detect	Timeout	1	hrs
Protections	PTO	Charge Threshold	250	mA
Protections	PTO	Delay	1800	s
Protections	PTO	Reset	2	userAh
Permanent Fail	CUDEP	Threshold	1500	mV
Permanent Fail	CUDEP	Delay	2	s
Permanent Fail	SUV	Threshold	2200	mV
Permanent Fail	SUV	Delay	5	s

Permanent Fail	SOV	Threshold	4500	mV
Permanent Fail	SOV	Delay	5	s
Permanent Fail	TOS	Threshold	500	mV
Permanent Fail	TOS	Delay	5	s
Permanent Fail	SOCC	Threshold	10000	userA
Permanent Fail	SOCC	Delay	5	s
Permanent Fail	SOCD	Threshold	-32000	userA
Permanent Fail	SOCD	Delay	5	s
Permanent Fail	SOT	Threshold	65	Â°C
Permanent Fail	SOT	Delay	5	s
Permanent Fail	SOTF	Threshold	85	Â°C
Permanent Fail	SOTF	Delay	5	s
Permanent Fail	VIMR	Check Voltage	3500	mV
Permanent Fail	VIMR	Max Relax Current	10	mA
Permanent Fail	VIMR	Threshold	500	mV
Permanent Fail	VIMR	Delay	5	s
Permanent Fail	VIMR	Relax Min Duration	100	s
Permanent Fail	VIMA	Check Voltage	3700	mV
Permanent Fail	VIMA	Min Active Current	50	mA
Permanent Fail	VIMA	Threshold	200	mV
Permanent Fail	VIMA	Delay	5	s
Permanent Fail	CFETF	OFF Threshold	20	mA
Permanent Fail	CFETF	OFF Delay	5	s
Permanent Fail	DFETF	OFF Threshold	-20	mA
Permanent Fail	DFETF	OFF Delay	5	s
Permanent Fail	VSSF	Fail Threshold	100	â€”
Permanent Fail	VSSF	Delay	5	s
Permanent Fail	2LVL	Delay	5	s
Permanent Fail	LFOF	Delay	5	s
Permanent Fail	HWMX	Delay	5	s
Security	Settings	Security Settings	0	Hex
Security	Keys	Unseal Key Step 1	414	Hex
Security	Keys	Unseal Key Step 2	3672	Hex
Security	Keys	Full Access Key Step 1	ffff	Hex

Security	Keys	Full Access Key Step 2	ffff	Hex
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