HiTrendtech

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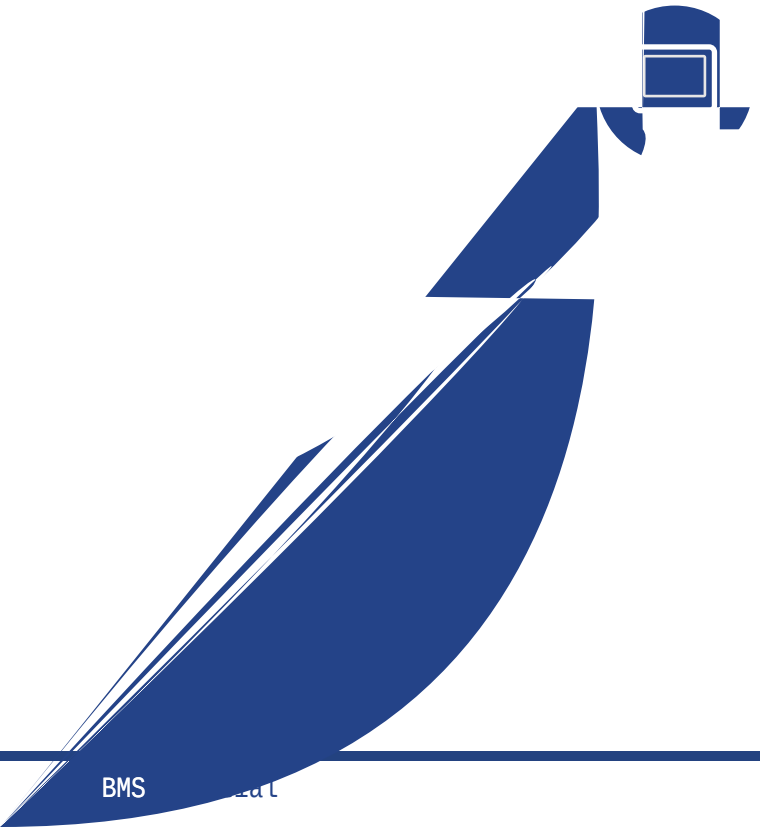

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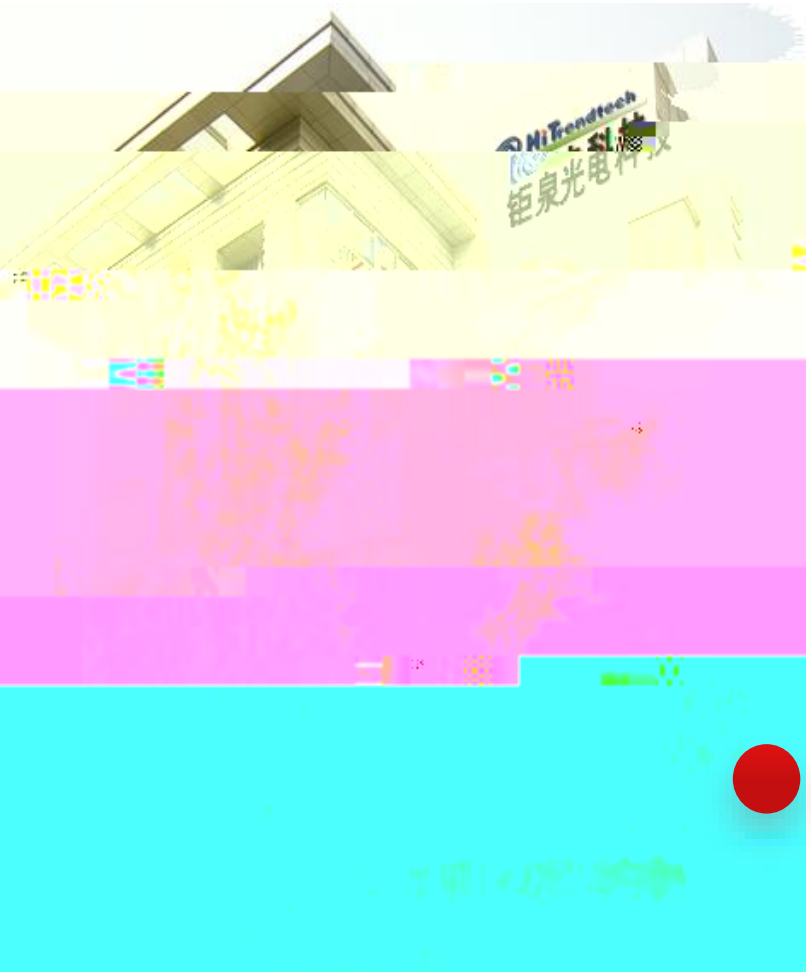

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产品中心

MCU产品内部集成了LCD液晶驱动、带自动温度

Hitrendtech

2023

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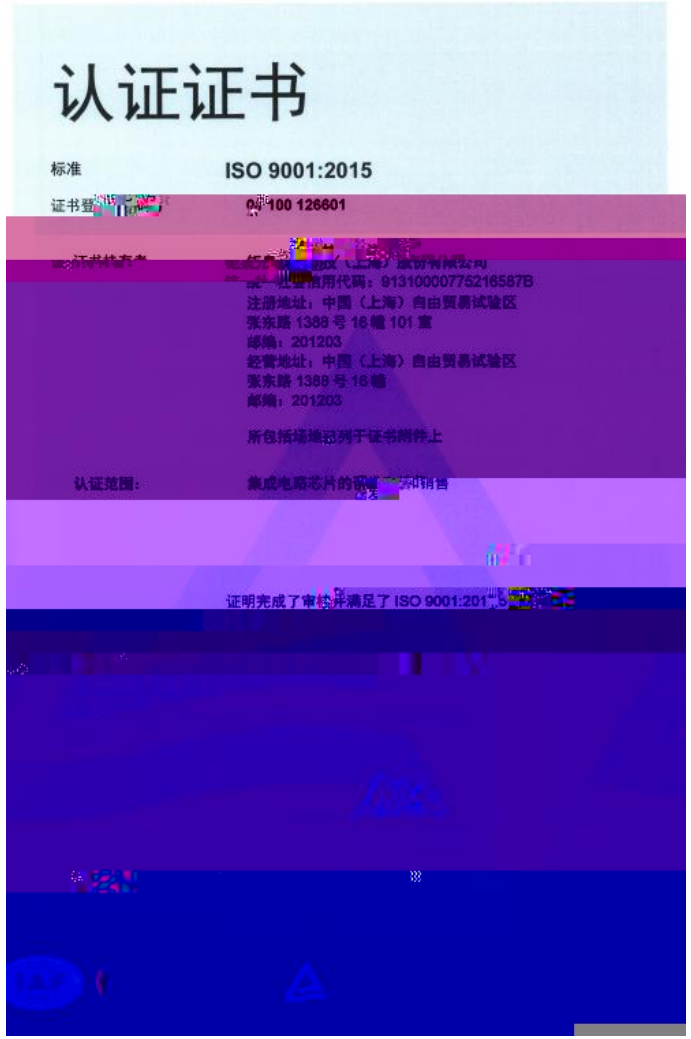
œ (,´CXGÿ1Ñ*6 ƒ3+E÷0; k?±+a 1Ñ*66| CS Ã Ct$À Ë Ã >N® Ò 9 £,´E÷ 0; Ã AîAÑ ¼ 0 E÷0; Ã G÷C]E÷0; Ã +O ×1Ñ*6E÷0; Ã #{Gÿ 6 À iF E÷0; 1y4ô @ È)F ËE÷0; *0û-(£ · & È ¦.ž 9ç Ç õ?±,´ Ÿ ¼Ct$À ÈF >|- ?ö Ã#{Gÿ ¼ 6 À È.ž CXGÿ ƒ3+ 9 xF >| ¦ 15 iF Ä



Ability 7- Ë -- Î »"r _ , = Ý w.D 7- Ë

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Innovation K à -- ÷ ¾ M™ È6Š'V8²7- ÿ Â7-$À Ä+X

Collaboration • Œ--5Ô1†5Ô Ë È Q Ò g% ? Ö È ¡ K Ë ÄK.,ø Y JC’ à pM’

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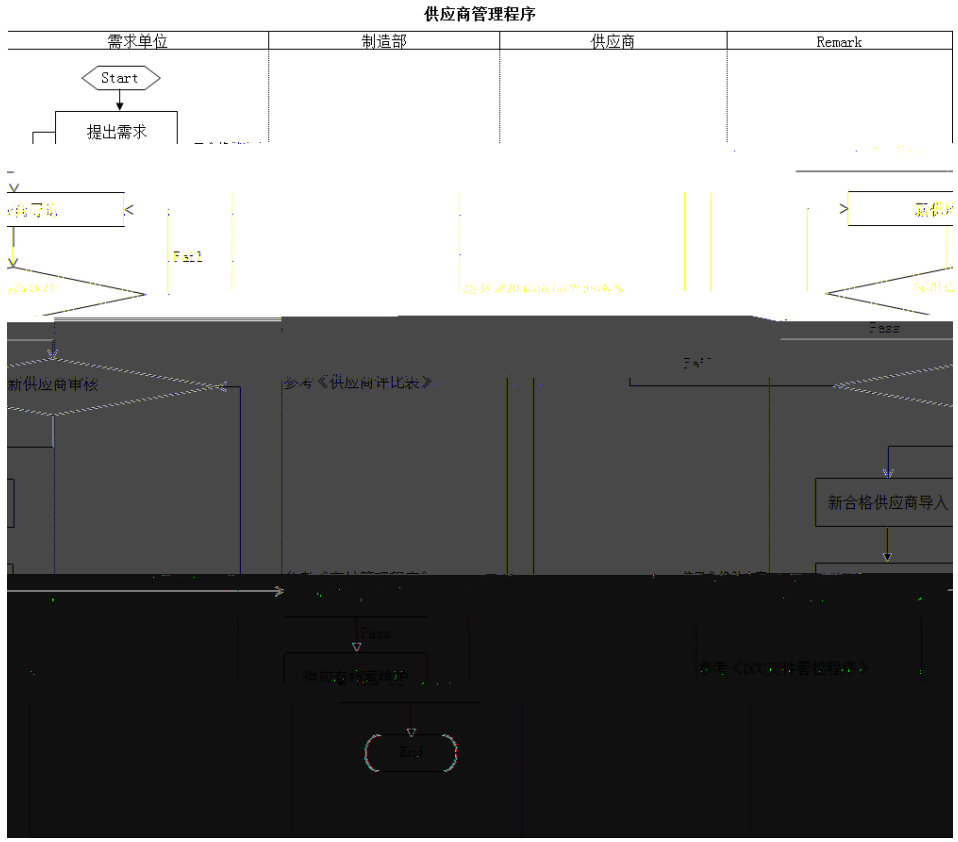
职能		职责定义
制造部	制造部主管	签核《供应商评比表》--签核及价格评比
	委外生管单位	提交《供应商评比表》--交期、配合度部分评比
	测试单位	提交《供应商评比表》--测试部分评比
	产品工程单位	提交《供应商评比表》--产品部分评比
	质量单位	提交《供应商评比表》--质量部分评比

Aô" 7 ö

分数	90~100	70~89	60~69	59以下
等级	A	B	C	D
奖惩	优先并增加采购量	维持正常采购量	减少采购量，并加强督导要求供应商提供取消合格供应商资	连续三次

由于某些材料属特殊制程，或只有单一厂商生产，则评比结果不被等级范围限制，
结果仍需通知厂商，要求改善达到标准。



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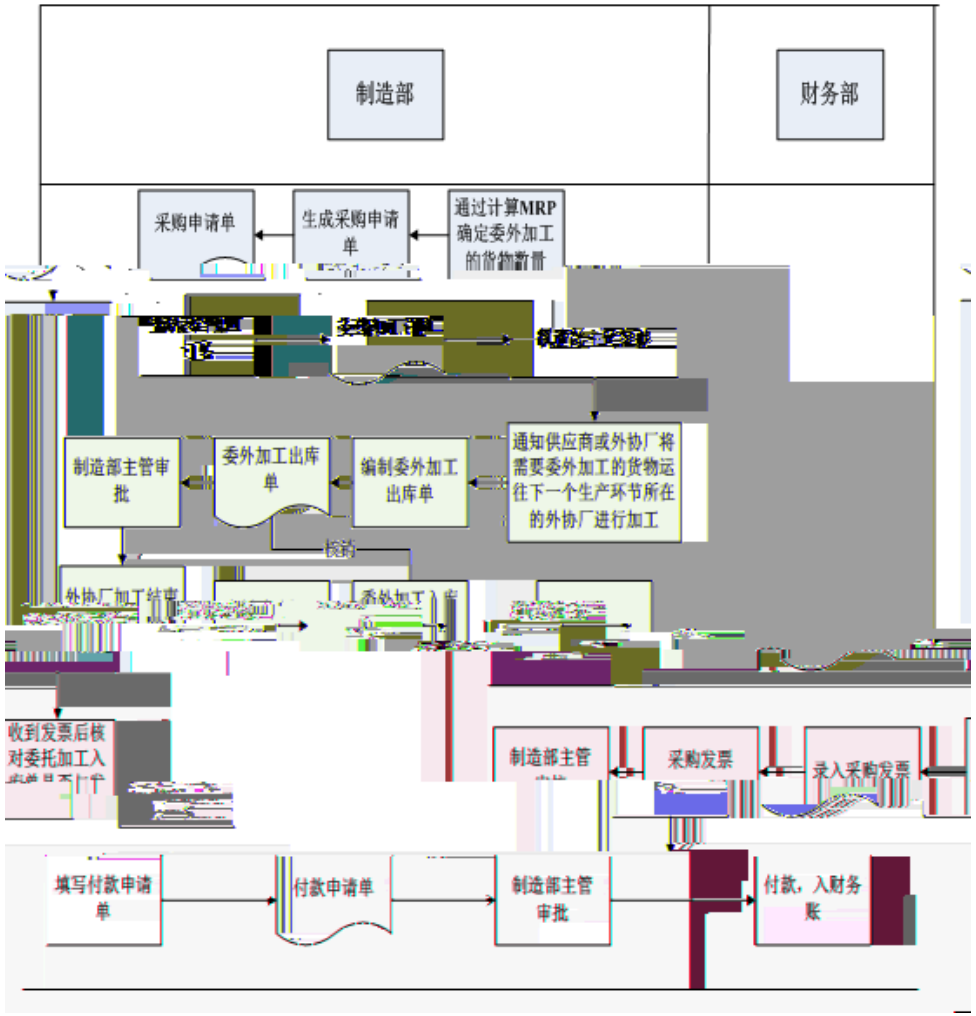

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质量监控指标

项目	指标	监控频度	备注	监控形式
wafer 良率	95%~99%	每批	视产品而定	代工月报
封装良率	0.99	每批		代工月报
封装工艺	CPK>1.33	每月		代工月报
封装可靠性	零失效	季度		
CP测试良率	95%~98%	每批	视产品而定	代工月报
FT测试良率	95%~98%	每批	视产品而定	代工月报
QQC 抽检标准	AQL=0.065%	每批		异常反馈
外观检验标准	1	每批		异常反馈
Loss+Damage	<10ea	每批		异常反馈

1 CPK Complex Process Capability index ,
CPK
A++
A+ 2.0 Cpk
A 1.67 CPK

BMS

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BMS AFE&

AFE -HT32106

Features:

Battery monitor : 3~6 series cells

16bit ADC*2 : simultaneous current & voltage sampling

accuracy of cell voltage <5mV @Full Range

accuracy of cell current < 0.2% @Full Range

Integrated : LDOs 3.3/5V, Pre-Charge, Pre-Discharge

High voltage tolerance : High supply voltage absolute maximum (up to 36 V)

Support ÖAuto or host controlled cell balancing Èprotections

Power consumption:

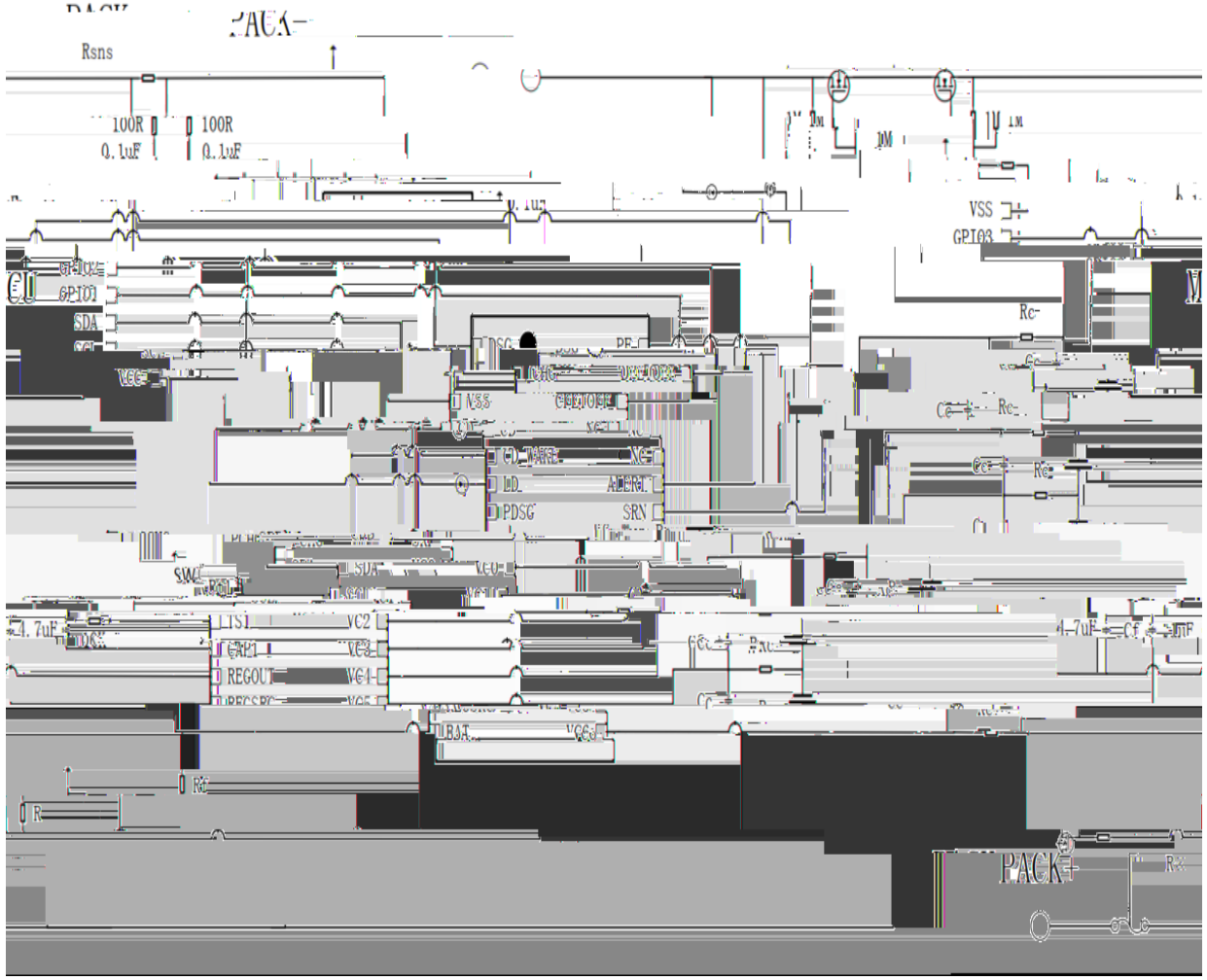
Shut down mode: <2uA

Support : I2C with CRC

Others:

Package: DFN30

Operation Temperature: -40 ~+85



AFE -HT32112

Features:

Battery monitor : 6~12 series cells

16bit ADC*2 : simultaneous current & voltage sampling

accuracy of cell voltage <5mV @Full Range

accuracy of cell current < 0.2% @Full Range

Integrated : LDOs 3.3/5V, Pre-Charge, Pre-Discharge

High voltage tolerance : High supply voltage absolute maximum (up to 72 V)

Support ÖAuto or host controlled cell balancing Èprotections

Power consumption:

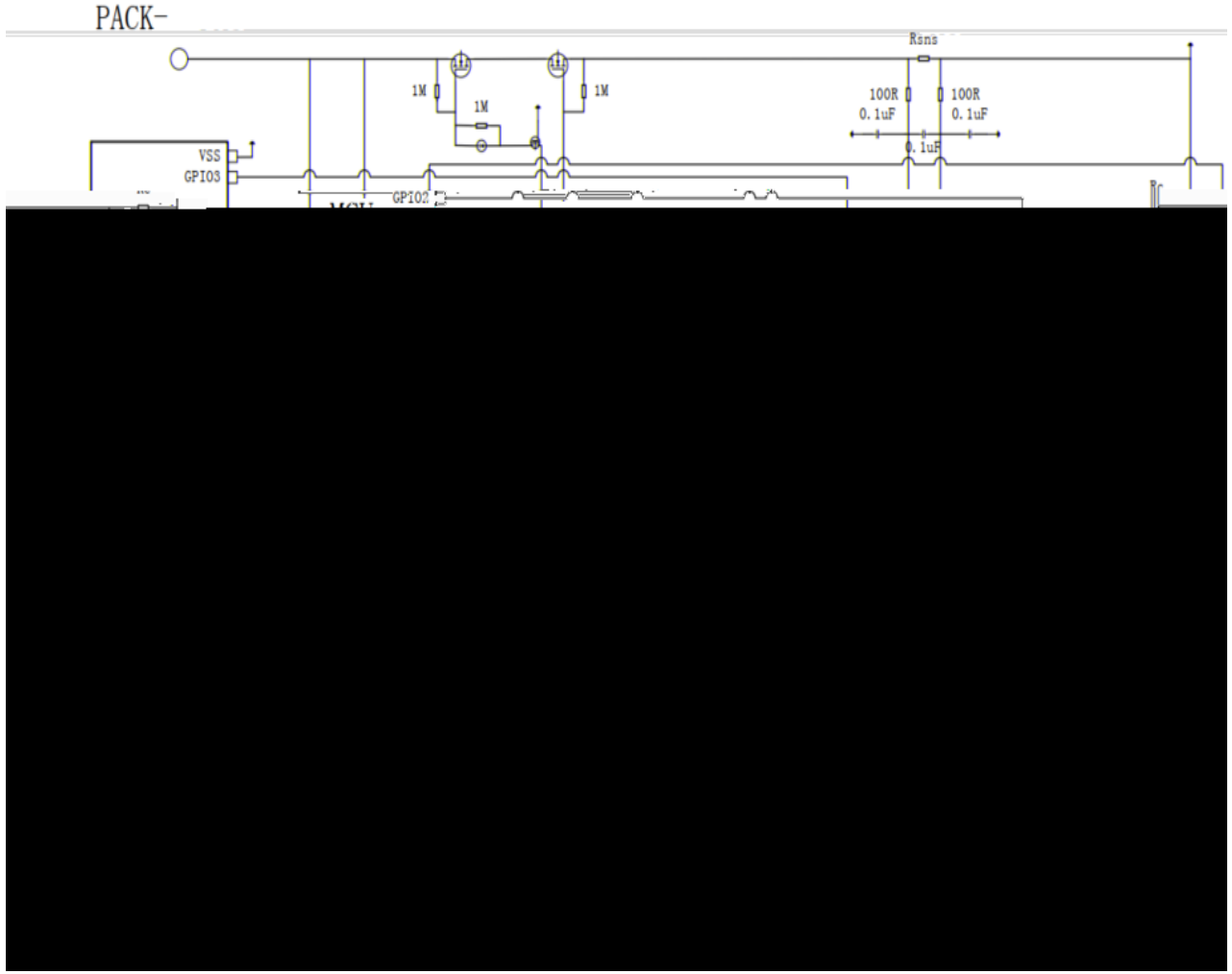
Shut down mode: <2uA

Support : I2C with CRC

Others:

Package: DFN44

Operation Temperature: -40 ~+85



AFE -HT32118

Features:

Battery monitor : 9~18 series cells

16bit ADC*2 : simultaneous current & voltage sampling

accuracy of cell voltage <5mV @Full Range

accuracy of cell current < 0.2% @Full Range

Integrated : LDOs 3.3/5V, Pre-Charge, Pre-Discharge

High voltage tolerance : High supply voltage absolute maximum (up to 108 V)

Support ÖAuto or host controlled cell balancing Èprotections

Power consumption:

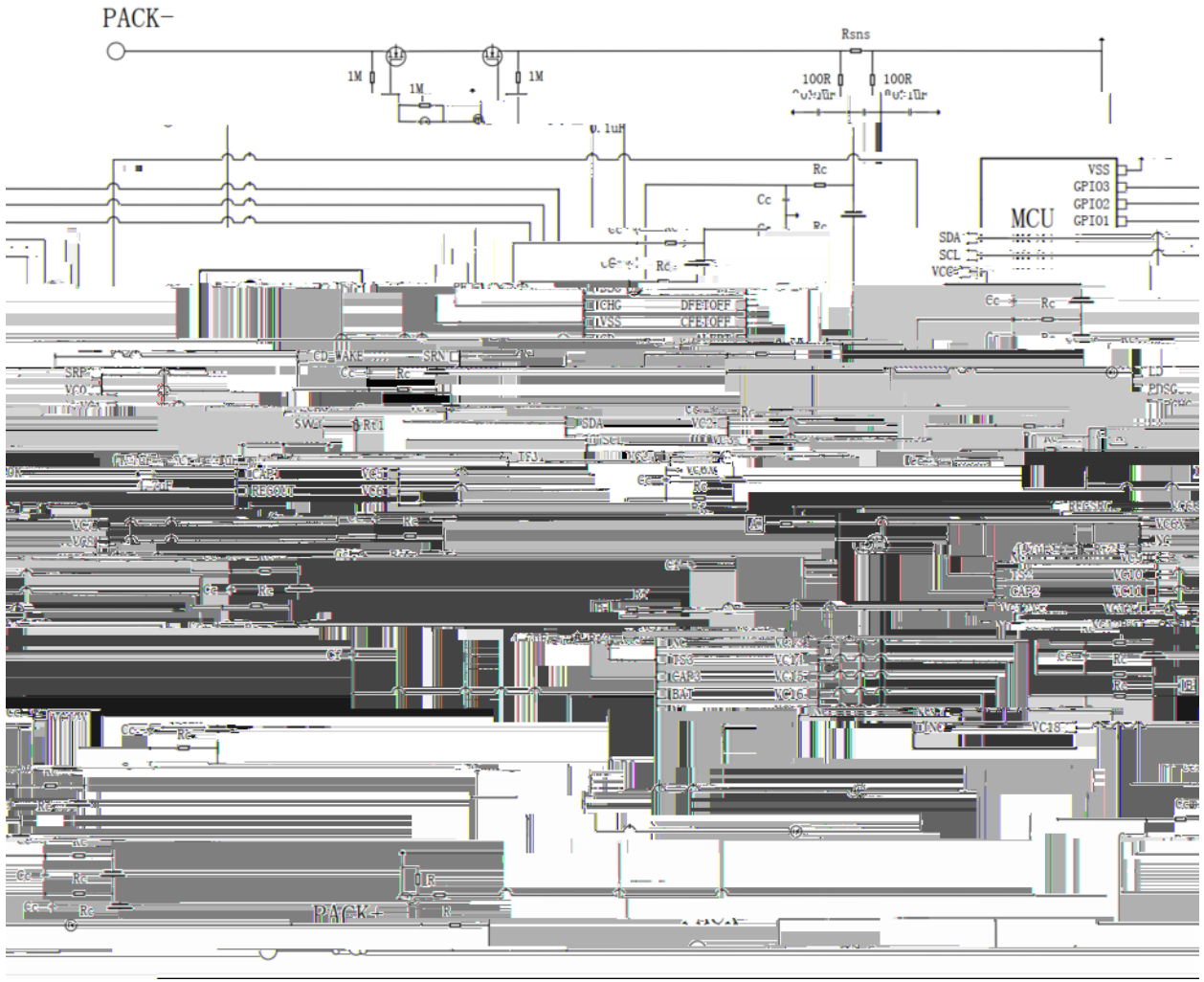
Shut down mode: <2uA

Support : I2C with CRC

Others:

Package: DFN54

Operation Temperature: -40 ~+85



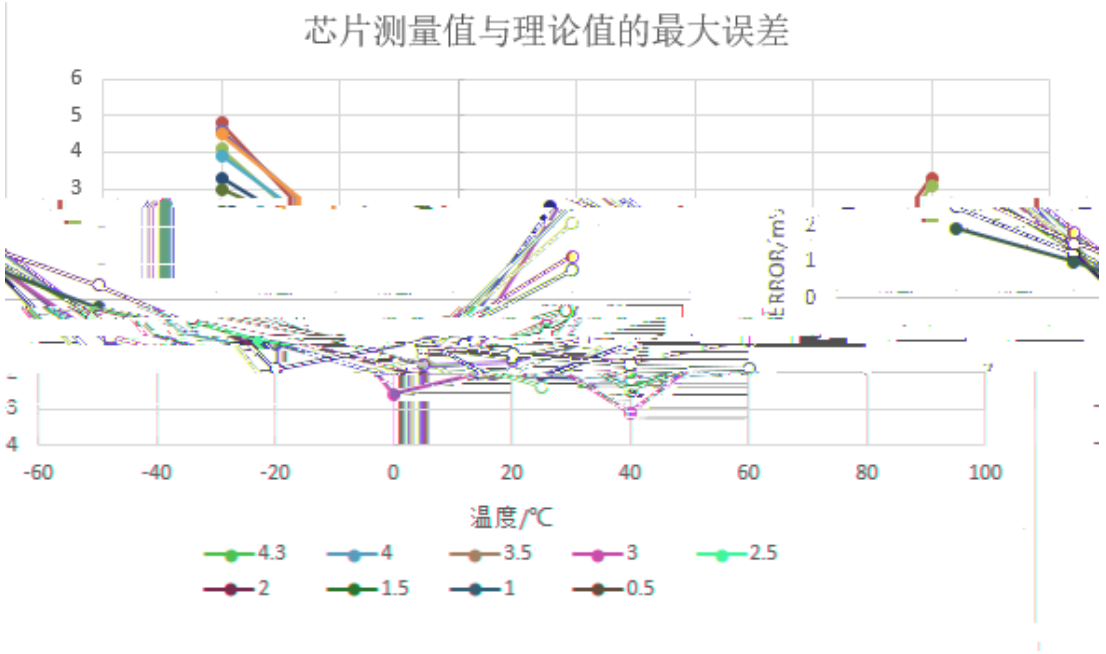
AFE-HT321XX

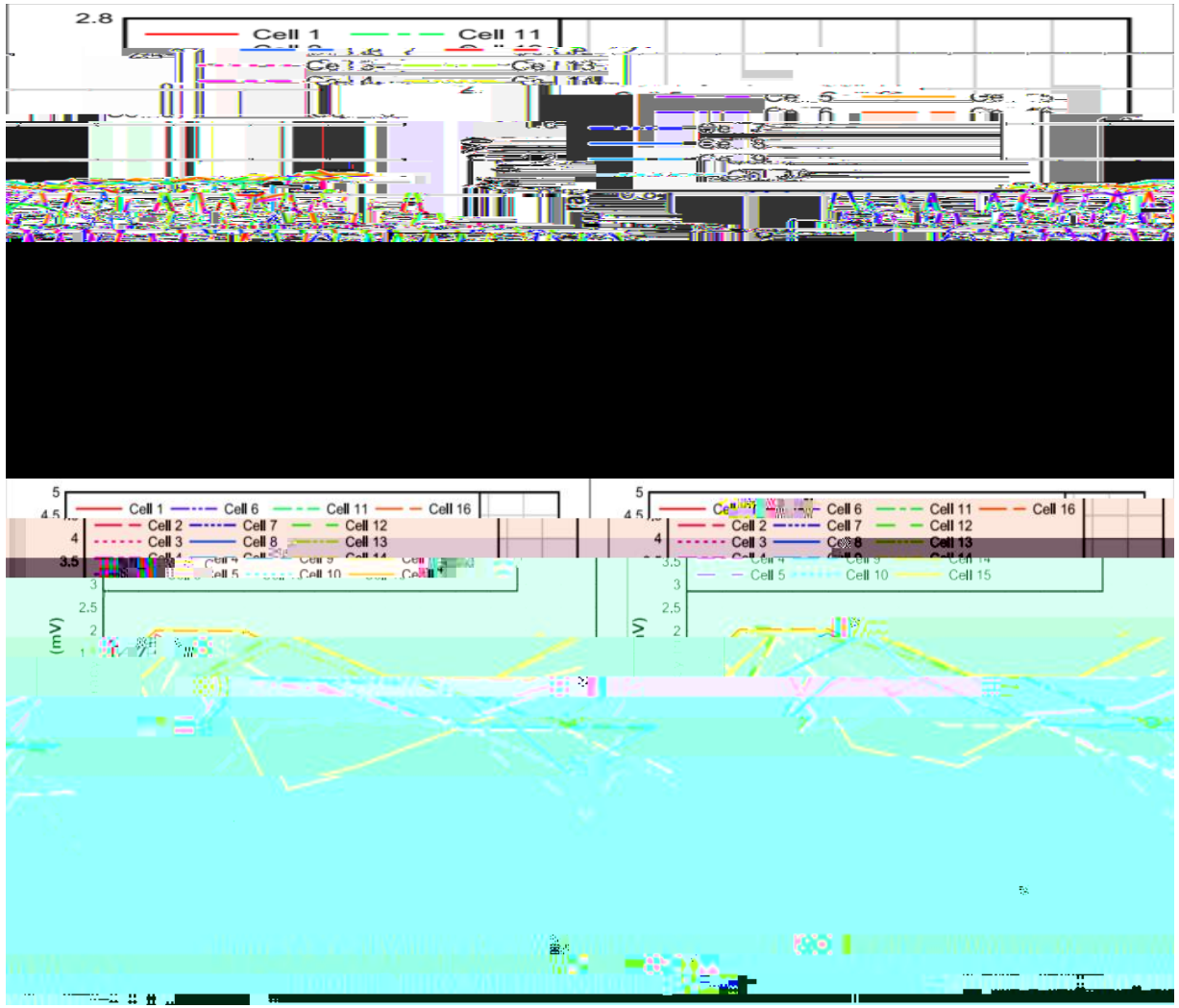
	HT32106	HT32112	HT32118
	3~6	6~12	9~18
	MCU	MCU	MCU
	16 Bit VADC	16 Bit VADC	16 Bit VADC
	16 Bit CADC	16 Bit CADC	16 Bit CADC
	√	√	√
	√	√	√
	√	√	√
	√	√	√
/	√	√	√
/	√	√	√
LDO 3.3V/5V	√	√	√
(I C)	√	√	√
	√	√	√
	DFN30	DFN44	DFN54
	-40 ~85	-40 ~85	-40 ~85

VADC HT321XX VS BQ76952

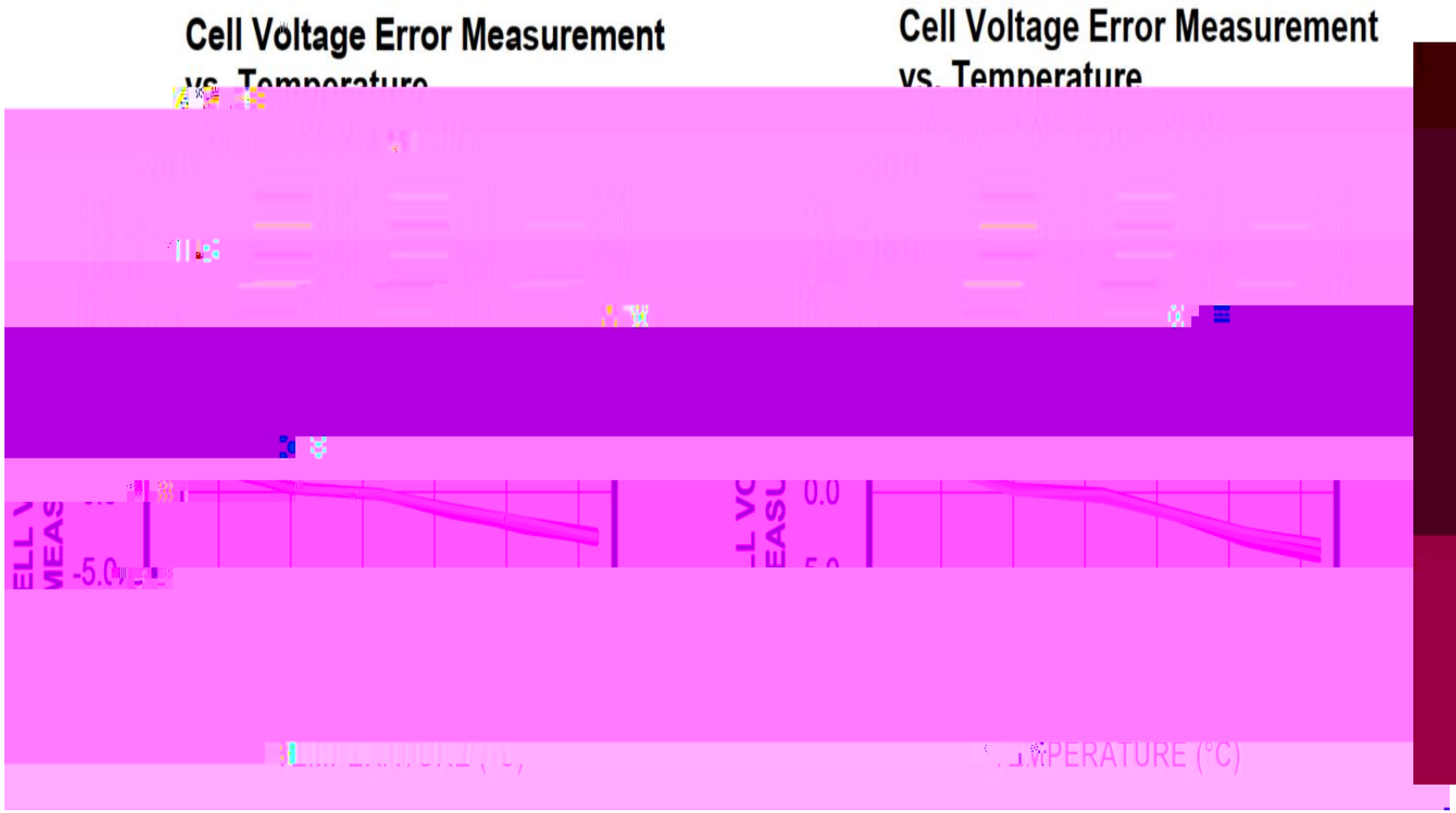
芯片测量值与理论值的最大误差/mV

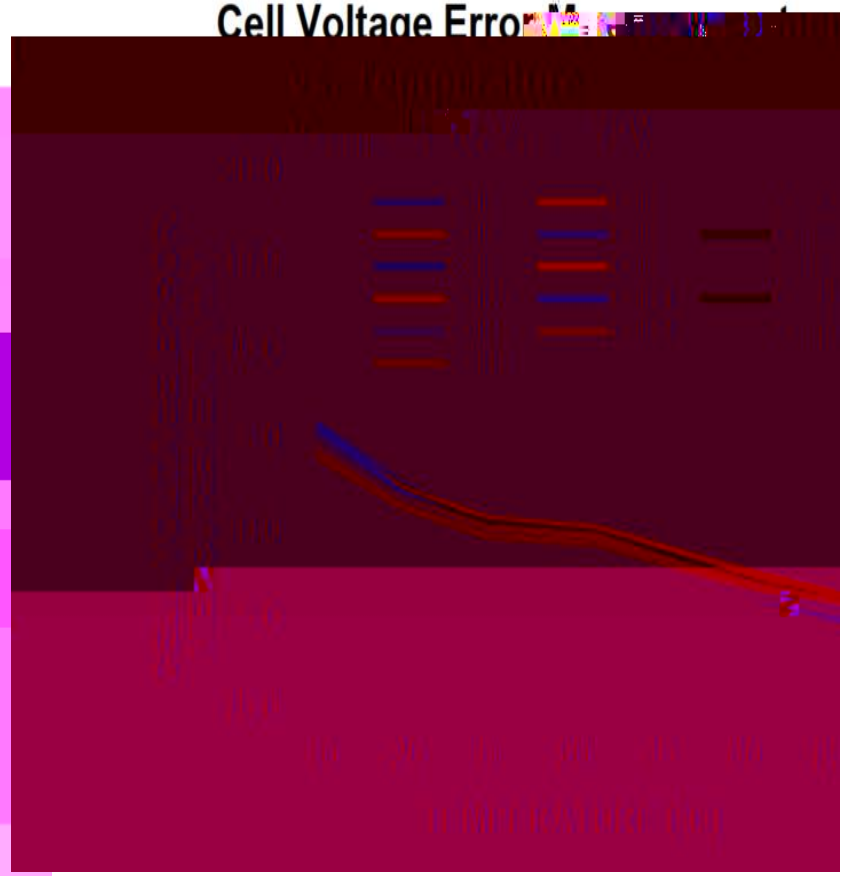
	-40	-20	0	25	40	60	80
4.3	4.8	1.3	-1.2	-2.4	-2.4	-1.2	3.3
4	4.1	1.2	-1	-2.1	-2.2	-1.9	3.1
3.5	4.6	1.7	-0.6	-1.8	-2	-0.6	2.6
3	3.9	1.5	-2.6	-1.6	-3.1	-0.7	2.1
2.5	4.5	1.8	-0.6	-1.8	-1.7	-0.8	1.2
2	3.3	1.3	-0.5	-1.3	-1.6	-0.9	0.8
1.5	2.5	1.2	-1.9	-1.1	-2.5	-1.2	-0.3
1	3	1.5	0.4	-1.3	-1.5	-1.7	-1.1
0.5	1.9	1	-0.2	-1.1	-1.5	-1.8	-1.9



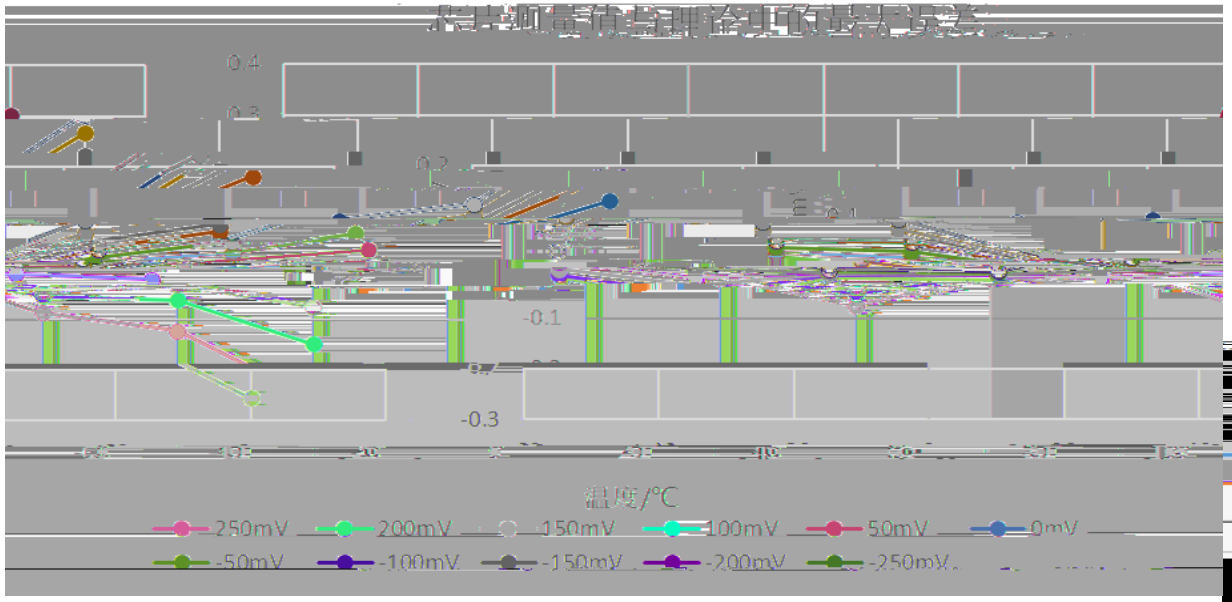


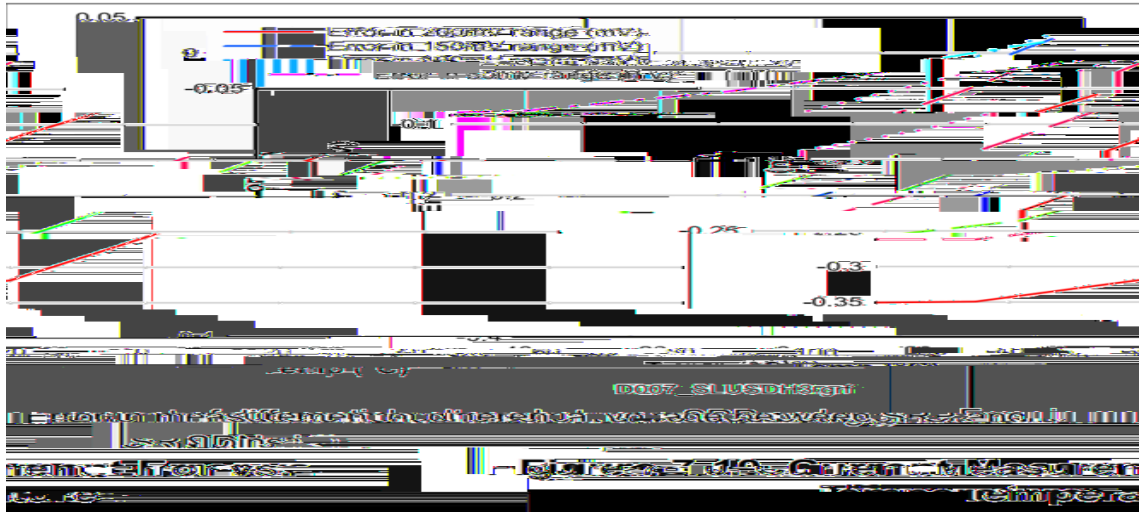
VADC HT321XX VS MP2797

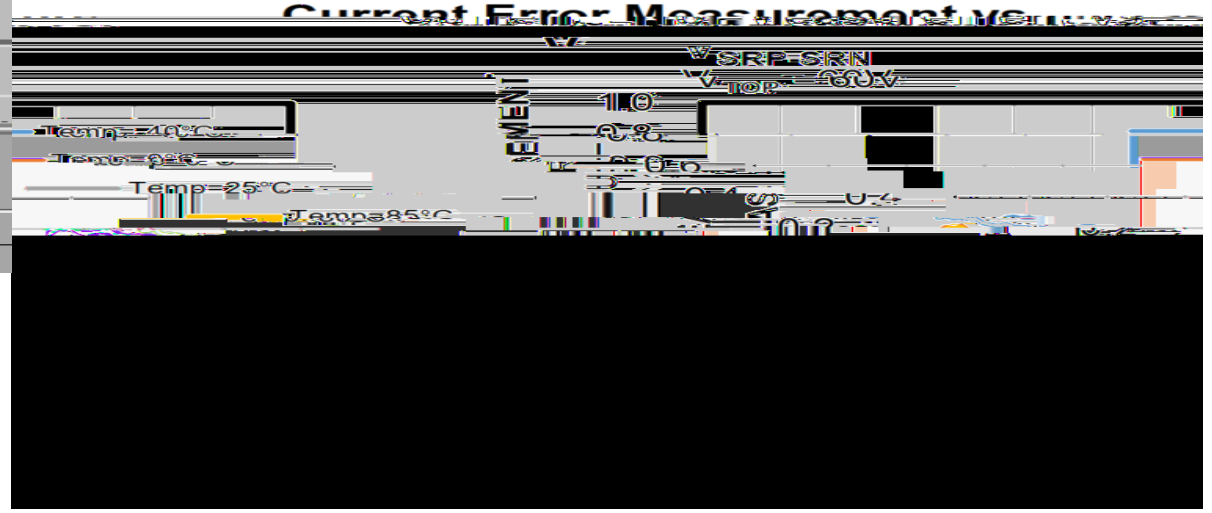




CADC ,HT321XX VS BQ76952 & MP2797







Gauge

CPU

32Bit Core, HRC: 4.2MHz, LRC: 65.536KHz

Flash: 64KB, SRAM: 4KB

Peripheral

Supports I2C, HDQ, 2*ADC 16BIT

Algorithm Support: SOH, Qmax@OCV, RSOC

Accuracy :1% RSoC, Current resistor 1mohm,

Power Consumption: Normal <80uA, sleep <20uA; Deep sleep <10uA × Hibernate mode < 3uA

Authentication: SHA-1\SHA-256 HMAC

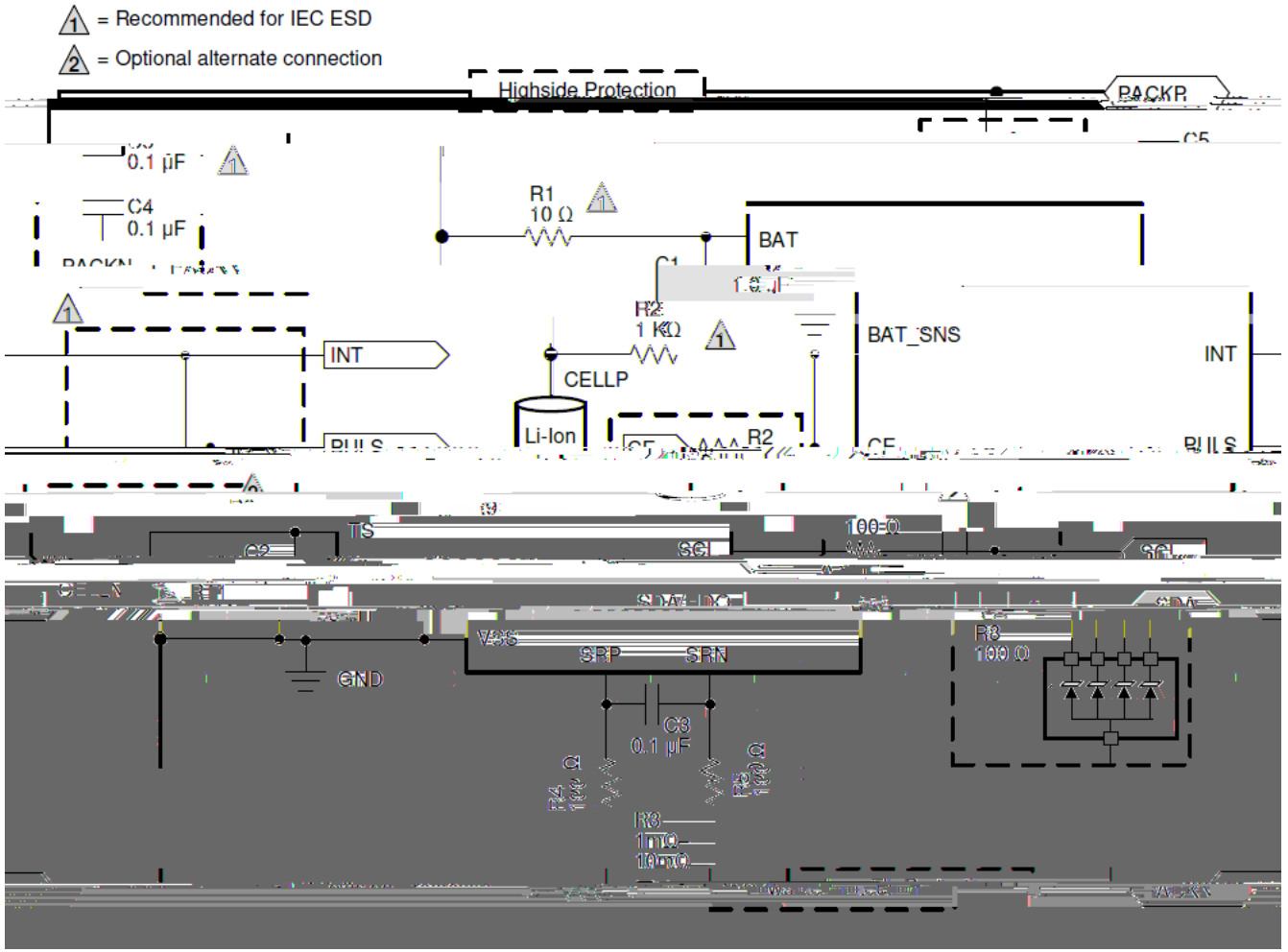
SWD, hardware WDT

Others

Package: CSP12, CSP9 ÃDFN12

Operation voltage: 2V~5.5V

Operation Temperature: -40 ~+85



Features

Measures Up to 1rUn BattrUnery-22(CelA)6les -22(i)5(n S)7nerierUn(s)]TETQ EMC /Span <</MCID75/Lang (en-US)>BDC q.000014305 0 960 540 reW* nBT/F11 9.804 Tf1 0 0 1 73.2382.448 Tm0 g

Bridge

Features

Up to 2 Mbps isolated bidirectional serial data communications

Simple galvanic isolation using capacitors or transformers

Bidirectional interface over a single twisted pair

Supports cable lengths up to 100 meters

Very low EMI susceptibility and emissions

LPCM support for Analog Devices battery monitors

Interrupt output for LPCM system wake-up

Ultralow idle current

Automatic interface wake-up detection

2.7V to 5.5 V isoSPI driver pG[U6V)4(s)-3lyoSPI

BMS

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AFE & Monitor

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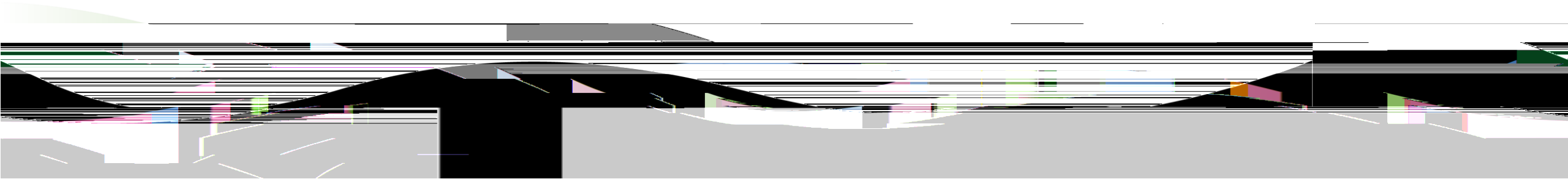
HiTrendtech

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