1. General Requirements

All components have to be mounted according to the drawing: GAA26800MX The bare board is specified as: GAA610ADB

2. Revision History

Version	Date	Revised by	Description
1.0	2010-APR-13	A. Tutat	Initial Version
1.1	2010-MAY-28	A. Tutat	some limits adapted
1.2	2010-DEC-28	A. Tutat	test cases PTC not required
1.3	2011-JAN-06	A. Tutat	SMPS load resistors (2k)

3. Code Requirements

The board has been laid out according to the requirements in EN81, VDE110-1 (Transient Voltage 4kV; Inhomogeneous Field, Pollution Degree 2 and Safety relevant areas to other areas: Pollution Degree 3; Clearance Distance: Table2; Creepage Distance: Table

Date	Changes	Name	Took Dominion and for		GAA2680	OMY TO
2010-MAY-28	some limits adapted, CA47A-000528	A. Tutat	Test Requirement for PBX BIDI		GAAZOOL	JUIVIA_ I TI
2010-DEC-28	test cases PTC not required, CA47A-000528	A. Tutat	ו פופן		12 SHEETS	- SHEET 1
2011-JAN-06	SMPS load resistors (2k), CA47A-000528	A. Tutat	OTIS	RESP	2010-APR-13	A. Tutat
			Elevator Company	CHK	2010-APR-13	M. Dehmlow
			Enigneering Center Berlin	AUT	2010-APR-13	CA47A-000528

4. Data logging Requirements for the purpose of statistical analysis.

All measurement results should be written together with the PCB serial number and production-date into a file. The time-interval to produce a back-up of the file should be determined by the factory. Also must be determined how many records are captured per file.

Construction of the file:

- 1. PCB serial number
- 2. production-date
- 3. all measurement results, The variable-names should consist of a combination of Symbol-Name and Parameter-Name.) Visual separation through special character, for example: ********************************.

5. Electrical Requirements

Unless otherwise noted MIN/MAX values are valid for temperatures between +0degC and +70degC. All typical values are calculated for an ambient temperature of Ta=25degC.

DC values have to be measured with an average reading meter. AC values have to be measured with a true-RMS meter. DC values are marked with the unit V or A, AC values are marked with Vrms or Arms.

The remark "Logic Level" (LL) relates to HCMOS standard: "High" = 3.5V ... 5.7V and "Low"=-0.7V ... 1.0V.

Date	Changes	Name	Took Dominion and for		GAA2680	OMV TD
2010-MAY-28	some limits adapted, CA47A-000528	A. Tutat	Test Requirement for PBX BIDI		GAAZ000	OWIX_I H
2010-DEC-28	test cases PTC not required, CA47A-000528	A. Tutat	ו טא_טוטו		12 SHEETS	- SHEET 2
2011-JAN-06	SMPS load resistors (2k), CA47A-000528	A. Tutat	OTIS	RESP	2010-APR-13	A. Tutat
			Elevator Company	CHK	2010-APR-13	M. Dehmlow
			Enigneering Center Berlin	AUT	2010-APR-13	CA47A-000528

5.1. Power supply

If within the test cases no other supply voltages are indicated, the board has to be supplied with the following voltages:

24V_HL2 +24V / current limitable to max. 500mA at P5.46 (referenced to HL2)

HL2 at P5.44

24V SE +24V / current limitable to max. 500mA at P1.1 (referenced to 24V SE RTN)

24V_SE_RTN at P1.2

24V SW +24V / current limitable to max. 500mA at P4.1 (referenced to 24V SW RTN)

24V_SW_RTN at P4.2

24V SENSE +24V / current limitable to max. 500mA at P5.50 (referenced to 24V SENSE RTN)

24V SENSE RTN at P5.48

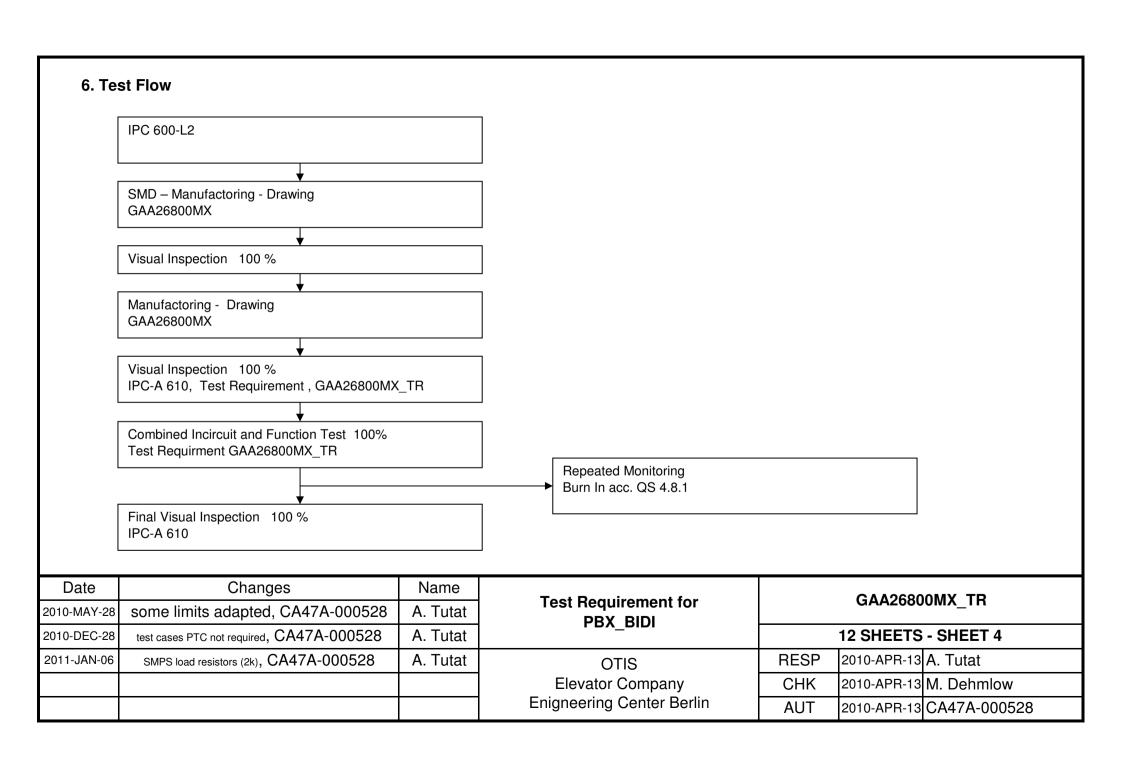
V+15V +15V / current limitable to max. 200mA at P3.40 (referenced to AGND)
V-15V -15V / current limitable to max. 200mA at P3.39 (referenced to AGND)

AGND at P3.38

VCC +5V / current limitable to max. 200mA at P3.13 (referenced to GND)

GND at P3.12

Date	Changes	Name	Took Dominorous for		GAA26800M	IV TD
2010-MAY-28	some limits adapted, CA47A-000528	A. Tutat	Test Requirement for PBX BIDI		GAAZOOUW	IA_IR
2010-DEC-28	test cases PTC not required, CA47A-000528	A. Tutat	ו טא_טוטו		12 SHEETS - S	SHEET 3
2011-JAN-06	SMPS load resistors (2k), CA47A-000528	A. Tutat	OTIS	RESP	2010-APR-13 A .	Tutat
			Elevator Company	CHK	2010-APR-13 M.	Dehmlow
			Enigneering Center Berlin	AUT	2010-APR-13 CA	\47A-000528



Test Requirement for PBX_BIDI GAA26	800MX												
 All measuring instruments must be calibrated!!! As an additional document, the circuit diagram of the PCB 	Δ is required												
3. All measuring points : reference points are described in kir		test points or component designator.											
4. PBX_BIDI alternatively assembled with CONVERTER- or												Value range	
test cases only for PBX_BIDI, INVERTER-FUNCTIONA						Sa	mples						
test cases only for PBX_BIDI, CONVERTER-FUNCTIO												ver Specification Li	
test cases <u>not required for GAA26800MX1, GAA26800</u> 5. Highly Accelerated Life Test, test cases required for HAL		marked with note: 4									Up	per Specification Li	THE
5. Highly Accelerated Life Test, test cases required for HAL	i, marked with no	ole. 3											
	Te	est cases			Boa	rd Se	erial N	umbe	r		LSL	Typical	USL
Description					1	1	J. Id. IV	1				. yp.cu.	
	note	@ specified condition	unit										
Power Supply: IGBT Gate Driver PHASE R(U)	1	quiescent current consumption: 24V_SW @ 24VDC									180,00	236,00	290,00
		current: IGBT driver SMPS	mA										
SMPS characteristic	2	quiescent current consumption: 24V_SE @ 24VDC	,								180,00	236,00	360,00
Switched Mode Power Supply		current: IGBT driver SMPS, SENSING SMPS PWM VCC RU: 24V DRIVER RTN				-					10,00	11.00	13.00
Power Fail Detection		I SENSE RU: 24V DRIVER RTN	V	_		-					0,10	0.60	0.90
rower rail Detection		SWITCHING ON-DUTY-CYCLE w/o any additional load				+					5,00	20,00	30,00
		PWM CONTROLLER output pin or MOSFET DRAIN	0/								1,11	, , ,	
preparation:		GATE_SENSE_RU: 24_DRIVER_RTN	%										
Please add additional load resistors (2k) to:		DRAIN_RU: 24_DRIVER_RTN											
1.)		SWITCHING FREQUENCY									140,00	160,00	180,00
+27V_RU_P : +27V_RU_P_RTN		PWM CONTROLLER output pin or MOSFET DRAIN GATE SENSE RU: 24 DRIVER RTN	kHz										
2.)		DRAIN RU: 24 DRIVER RTN	KI IZ										
+27V_RU_N : +27V_RU_N_RTN													
	3										26,00		29,00
	3										26,00		29,00
		REF_3V9_RU_P:+27V_RU_P_RTN REF_2V5_RU_P:+27V_RU_P_RTN				_	-				6,50 2,38	7,00 2,50	7,50 2,63
	- I	PF IGBT threshold voltage									2,30	2,30	3,10
		Increase +27V RU P from 0V until output a transition occurs: HIGH to LOV	v								2,00	2,40	0,70
		MX1: PF_IGBT_INV : GND											
		MX2: PF_IGBT_CONV : GND											
		preparation: disconnect primary 24V_SW and 24V_SE supply,											
		add an adjustable supply only on											
		+27V RU P referenced to +27V RU P RTN											
			V										
		REF_3V9_RU_N:+27V_RU_N_RTN					+			-	6,50	7,00	7,50
		REF_2V5_RU_N: +27V_RU_N_RTN									2,38	2,50	2,63
		PF_IGBT threshold voltage									2,00	2,40	3,10
		Increase +27V_RU_N from 0V until output a transition occurs: HIGH to LO	٧										
		MX1: PF_IGBT_INV : GND											
		MX2: PF_IGBT_CONV : GND											
		preparation:											
		disconnect primary 24V SW and 24V SE supply,											
		add an adjustable supply only on											
		+27V_RU_N referenced to +27V_RU_N_RTN											

Test Requirement for PBX_BIDI GAA26	800MX												
All measuring instruments must be calibrated!!!													
2. As an additional document, the circuit diagram of the PCE	BA is required.												
3. All measuring points: reference points are described in ki	ind of netnames,	test points or component designator.										Value vanue	
4. PBX_BIDI alternatively assembled with CONVERTER- or	r INVERTER-FUI	NCTIONALITY										Value range	
test cases only for PBX_BIDI, INVERTER-FUNCTION.	ALITY, GAA26	6800MX1, marked with note: 1				Sa	amples	,					
test cases only for PBX_BIDI, CONVERTER-FUNCTION	ONALITY, GAA2	6800MX2, marked with note: 2										er Specification Li	
test cases not required for GAA26800MX1, GAA2680		marked with note: 4									U pp	er Specification Li	nit
5. Highly Accelerated Life Test, test cases required for HAL	T, marked with r	note: 3											
B		rest cases			Boa	rd S	erial N	umbe	er		LSL	Typical	USL
Description	note	measuring point : reference point	unit										
	2	@ specified condition	u										
Power Supply: IGBT Gate Driver PHASE S(V)		PWM VCC SV: 24V DRIVER RTN									10,00	11,00	13.00
rower suppry. Idd i date briver rhase 3(V)	-	I SENSE SV: 24V DRIVER RTN	V			-					0,10	0.60	0.90
SMPS characteristic		SWITCHING ON-DUTY-CYCLE w/o any additional load		 		+	-	1		- 	5.00	20,00	30.00
Switched Mode Power Supply		PWM CONTROLLER output pin or MOSFET DRAIN									3,00	20,00	50,00
Switched Mode Power Suppry		GATE SENSE SV : 24 DRIVER RTN	%										
Power Fail Detection		DRAIN SV: 24 DRIVER RTN											
Fower Fail Detection		SWITCHING FREQUENCY				+					140.00	160,00	180,00
		PWM CONTROLLER output pin or MOSFET DRAIN									,	,	,
preparation:		GATE SENSE RU: 24 DRIVER RTN	kHz										
Please add additional load resistors (2k) to:		DRAIN RU: 24 DRIVER RTN											
1 \		3 +27V SV P:+27V SV P RTN				+					26,00	27.00	29.00
+27V_SV_P:+27V_SV_P_RTN		3 +27V SV N:+27V SV N RTN									26,00	27,00	29,00
+2/V_3V_F . +2/V_3V_F_NIN		REF 3V9 SV P:+27V SV P RTN									6,50	7,00	7,50
+27V SV N:+27V SV N RTN		REF 2V5 SV P:+27V SV P RTN									2,38	2,50	2,63
+2/V_5V_N : +2/V_5V_N_N N		PF IGBT threshold voltage									2,00	2,40	3,10
		Increase +27V_SV_P from 0V until output a transition occurs: HIGH to LOV	/										
		MX1: PF_IGBT_INV : GND											
		MX2: PF_IGBT_CONV : GND											
		preparation:											
		disconnect primary 24V_SW and 24V_SE supply,											
		add an adjustable supply only on											
		+27V_SV_P referenced to +27V_SV_P_RTN											
			V										
		REF 3V9 SV N:+27V SV N RTN				+					6.50	7,00	7,50
		REF 2V5 SV N:+27V SV N RTN				_					2.38	2,50	2,63
		PF IGBT threshold voltage		 		+	-				2,00	2,40	3,10
		Increase +27V SV N from 0V until output a transition occurs: HIGH to LOV	,					1			2,00	2,40	5,10
		MX1: PF IGBT INV : GND											
		MX2: PF IGBT CONV : GND											
								1					
		preparation:											
		disconnect primary 24V SW and 24V SE supply,											
		add an adjustable supply only on						1					
		+27V SV N referenced to +27V SV N RTN											
		127 V_0 V_1 (1010101000 to +27 V_0 V_1 (111)											

SMPS characteristic Switched Mode Power Supply													
2. As an additional document, the circuit diagram of the PCRA is required. 2. PER, CERT International Control		800MX											
3. All measuring points or inference points are discrebed in lived of interfaces, large points or composed disgrapher. I Less Bill alternative years assembled with COVINCETHER or NORTHER PLANCIFORALITY (AAACSSOMIN), marked with role: 3 countries of the property assembled with COVINCETHER or NORTHER PLANCIFORALITY (CAAACSSOMIN), marked with role: 3 countries of the property of th													
A PLAN, IDIA aliensatively assembled with CONVERTIEN on NVERTIEN PLANS CHARGE I Estit cases only for PEX, DIL INVERTIEN PLANS CHARGE I Love Specification Limit best cases and required for ALX, marked with note 3. I Right ACCOUNTS AND ACCO													
set case only to PSR. BIO. LWESTER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER-FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. COMPATER FUNCTONALITY. GARASSONIAY. In analysis of the set case required for PSR. BIO. Compatible of												Value range	
Exercises only to PEX_BILD_CONVERTER FILTY_CALAZOMAXC_ marked with note: 2							_						
Upper Secolitation Limit							San	nples			Lou	or Consideration Lin	a it
Secretarised Life Test, test cases required for HALT, marked with note: 3													
Test cases			arked with note: 4								Орр	er Specification Lif	iit.
Description S S	5. Highly Accelerated Life Test, test cases required for HALT	i, marked with note: 3											
Description S S		Tool coo				Door	ad Can	dal No.	d		1.01	Tomical	uci
Power Supply: IGBT Gate Driver PHASE T(W)	Description			1	 _	Boar	a Ser	iai nu	mber		 LSL	турісаі	USL
Power Supply: IGBT Gate Driver PHASE T(W) PWM_VCC_TW_24V_DRIVER_RTN V	Description	18181		unit									
SINDS TW. 24V DRIVER RTN		2 2	@ specified condition										
SINDS TW. 24V DRIVER RTN													
SMIPS characteristic Switched Mode Power Supply Power Fail Detection Preparation: Switched Mode Power Supply Power Fail Detection Power Fail Detecti	Power Supply: IGBT Gate Driver PHASE T(W)			V									
PWM CONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN DRAIN_TM: 24. DRIVER RTN WORTHOLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN DRAIN_TM: 24. DRIVER RTN WINCHING FEQUENCY WINCONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER Output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER Output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER Output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER Output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER Output pin or MOSFET DRAIN GATE SIRSE TW: 24. DRIVER RTN WINCONTROLLER Output pin or MOSFET DRAIN WINTONTROLLER													0,90
GATE_SENSE_TW_24_DRIVER_RTN %											5,00	20,00	30,00
DRAIN TW. 24 DRIVER RTN SWITCHING PREQUENCY PMM CONTROLLER output pin or MOSFET DRAIN GATE_SENSE_TW. 24_DRIVER_RTN SWITCHING PREQUENCY PMM CONTROLLER output pin or MOSFET DRAIN GATE_SENSE_TW. 24_DRIVER_RTN SWITCHING PREQUENCY	Switched Mode Power Supply			0/2									
SWITCHING FREQUENCY PWM CONTROLLER output pin or MOSFET DRAIN GATE SERSE_TW: 22 DRIVER_RTN DRAIN_TW: 22 DRIVER_RTN DRAIN_TW: 24 DRIVER_RTN SEZY_TW_P. = 27V_TW_P. = 17V_TW_P.				/6									
PMM CONTROLLER output pin or MOSFET DRAIN SATE SENSE TW: 24 DRIVER RTN	Power Fail Detection	DRAIN	_IW:24_DRIVER_RIN										
CATE_SENSE_TW: 24_DRIVER_RTN Please add additional load resistors (2k) to:		SWITC	CHING FREQUENCY								140,00	160,00	180,00
SATE SENSE W. 24 ORIVEH RIND		PWM C	CONTROLLER output pin or MOSFET DRAIN	1.11=									
1.) 27V_TW_P:+27V_TW_P_RTN 2.1 2.1 3 +27V_TW_N:+27V_TW_P RTN 2.1 3 +27V_TW_N:+27V_TW_P RTN 2.1 3 +27V_TW_N:+27V_TW_P RTN 2.1 3 +27V_TW_N:+27V_TW_P RTN 3 +27V_TW_N:+27V_TW_P RTN 3 +27V_TW_N:+27V_TW_P RTN 4		GATE_	SENSE_TW: 24_DRIVER_RTN	КПZ									
3 -27V_TW_P-8TN 2-27V_TW_P-BTN 2-27V_TW_P-BTN 2-27V_TW_P-BTN 2-27V_TW_P-BTN 2-27V_TW_P-STV_TW	Please add additional load resistors (2k) to:												
2.) REF 3V9 TW P : +27V TW P RTN REF 2V5 TW P : +27V TW P RTN REF 2V5 TW P : +27V TW P RTN PF_IGBT Intreshold voltage Increase +27V TW P Prom OV until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on +27V_TW_P referenced to +27V_TW_P RTN REF 3V9 TW N : +27V TW N RTN REF 2V5 TW N : +27V TW N RTN REF 2V5 TW N : +27V TW N RTN NREF 2V5 TW N : +27V TW N RTN REF 2V5 TW N : +27V TW N R	1.)												29,00
REF 2V5 TW P: +27V TW P RTN REF 2V5 TW P: +27V TW P RTN	+27V_TW_P : +27V_TW_P_RTN												29,00
PF_IGBT threshold voltage 1	2.)												7,50
Increase +27V_TW_P from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV : CND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on +27V_TW_P referenced to +27V_TW_P_RTN REF_3V9_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN PF_IGBT_INV: NRTN PF_IGBT_INV : SND MX2: PF_IGBT_CONV : GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on adjustable supply only	+27V_TW_N : +27V_TW_N_RTN												
MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on +27V_TW_P referenced to +27V_TW_P_RTN REF_3V9_TW_N: +27V_TW_N RTN REF_2V5_TW_N: +27V_TW_N RTN PF_IGBT_INV: GND MX1: PF_IGBT_INV: GND MX2: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on											2,00	2,40	3,10
MX2: PF_GBT_CONV : GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on +27V_TW_P referenced to +27V_TW_P_RTN V REF_3V9_TW_N : +27V_TW_N_RTN REF_2V5_TW_N : +27V_TW_N_RTN PF_IGBT threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV : GND MX2: PF_IGBT_CONV : GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on													
preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on +27V_TW_P referenced to +27V_TW_P_RTN REF_3V9_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN PF_IGBT_threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_NV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on													
disconnect primary 24V_SW and 24V_SE supply, and an adjustable supply only on +27V_TW_P referenced to +27V_TW_P_RTN REF_3V9_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N. REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N. REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N. REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N. REF_2V5_		MX2: P	PF_IGBT_CONV : GND										
disconnect primary 24V_SW and 24V_SE supply, and an adjustable supply only on +27V_TW_P referenced to +27V_TW_P_RTN REF_3V9_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N. REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N. REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N. REF_2V5_TW_N: +27V_TW_N_RTN REF_2V5_TW_N. REF_2V5_													
add an adjustable supply only on +27V_TW_P referenced to +27V_TW_P_RTN REF_3V9_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN PF_IGBT threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on													
#27V_TW_P referenced to +27V_TW_P_RTN REF_3V9_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN #F IGBT threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on													
REF_3V9_TW_N: +27V_TW_N_RTN REF_2V5_TW_N: +27V_TW_N_RTN PF_IGBT threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on													
REF_3V9_TW_N:+27V_TW_N_RTN REF_2V5_TW_N:+27V_TW_N_RTN PF_IGBT threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on		+2/ V_1	TW_P referenced to +27 V_TW_P_NTN										
REF_2V5_TW_N:+27V_TW_N_RTN PF_IGBT threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on				V									
REF_2V5_TW_N:+27V_TW_N_RTN PF_IGBT threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on		BEF 3	V9 TW N:+27V TW N RTN								6.50	7.00	7,50
PF_IGBT threshold voltage Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on								1 1					2,63
Increase +27V_TW_N from 0V until output a transition occurs: HIGH to LOW MX1: PF_IGBT_INV: GND MX2: PF_IGBT_CONV: GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on							1	1 1	i	-	,		3,10
MX1: PF_IGBT_INV : GND MX2: PF_IGBT_CONV : GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on											2,00	_, 10	2,.0
MX2: PF_IGBT_CONV : GND preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on													
preparation: disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on													
disconnect primary 24V_SW and 24V_SE supply, add an adjustable supply only on													
add an adjustable supply only on		prepara	ation:										
add an adjustable supply only on													

Test Requirement for PBX_BIDI GAA26800MX													
All measuring instruments must be calibrated!!! As an additional document, the circuit diagram of the PCBA is required. All measuring points: reference points are described in kind of netrological disconsists. PBX_BIDI alternatively assembled with CONVERTER- or INVERTE test cases only for PBX_BIDI, INVERTER-FUNCTIONALITY, test cases only for PBX_BIDI, CONVERTER-FUNCTIONALITY, test cases not required for GAA26800MX1, GAA26800MX2. Highly Accelerated Life Test, test cases required for HALT, marked.	ames, R-FUN GAA26 GAA26	ICTIONALITY 800MX1, marked with note: 1 800MX2, marked with note: 2 marked with note: 4					Sam	ples				Value range er Specification Liner Specification Line	
		est cases			E	Board	Seri	al Nu	mber		LSL	Typical	USL
Description	note	measuring point : reference point @ specified condition	unit										
Power Supply: SENSING	1	quiescent current consumption: 24V_SENSE @ 24VDC	mA								20,00	100,00	200,00
SMPS characteristic		VCC_PWM_CONTROLLER: 24V_SMPS_SENSE_RTN	V								10,00	12,00	14,00
Switched Mode Power Supply		I_SENSE_PWM_CONTROLLER: 24V_SMPS_SENSE_RTN	_ v								0,10	0,60	0,90
	1	SWITCHING ON-DUTY-CYCLE PWM CONTROLLER output pin or MOSFET DRAIN SMPS_SENSE_GATE: 24V_SMPS_SENSE_RTN SMPS_SENSE_DRAIN: 24V_SMPS_SENSE_RTN	%								22,00	27,00	32,00
	2	SWITCHING ON-DUTY-CYCLE PWM CONTROLLER output pin or MOSFET DRAIN SMPS_SENSE_GATE: 24V_SMPS_SENSE_RTN SMPS_SENSE_DRAIN: 24V_SMPS_SENSE_RTN	%								22,00	39,00	44,00
		SWITCHING FREQUENCY PWM CONTROLLER output pin or MOSFET DRAIN SMPS_SENSE_GATE: 24V_SMPS_SENSE_RTN SMPS_SENSE_DRAIN: 24V_SMPS_SENSE_RTN	kHz								140,00	160,00	180,00
	3	CnvTempUref (Addr.: 0x10) measuring point: S+15V / SGND signal: +15V_SENSE / GND_SENSE	mV								14250,00	15000,00	15750,00
	3	-15V_SENSE : GND_SENSE									-15750,00	-15000,00	-14250,00
Power Supply: PTC Temperature Measurement	4	quiescent current consumption: 24V_HL2 @ 24VDC	mA								4,00	100,00	200,00
SMPS characteristic	_	current: SENSING SMPS SW TEMP SENSOR : HL2	kHz								180,00	200,00	220,00
Switched Mode Power Supply	3	5V_HL2 : HL2									4,75	5,00	5,25
preparation: Please connect, the test cases referred resistors between the inputs:	 	PTC_ADC: HL2 @ open PTC_1/PTC_6 PTC_ADC: HL2 @ 1k, 1% resistor between PTC_1/PTC_6	٧								3,00 1,00	3,70 1,20	5,00 1,80
PTC_1 and PTC_6		PTC_ADC: HL2 @ SHORT-CIRCUIT PTC_1/PTC_6 PTC_1: PTC_6	^								0,00 4,00	0,32 4,60	0,50 5,60
		F10_1.F10_0	mA								4,00	4,00	5,60
DC-Link-LED		Pilot LED flashing Frequency									5,00	7.00	15.00
acquisition via a LED sensor		Prior LED hashing Frequency									5,00	7,00	15,00
preparation:			Hz										
5VDC supply:													
DCP_LED referenced to DCN_LED_6 (NE555 Timer-pin1)													
IGBT Gate Driver voltages		RUP G11:RUP E11@PWM RP, PWM UP=HIGH:GND									-16,00	-9,50	-5,00
		RUP G11:RUP E11@PWM RP, PWM UP= LOW :GND		\vdash							14,00	15,70	17,00
preparation: 1.) All drivers must be stimulated such that a connected IGBT would be	е	RUN_G21:RUN_E21@PWM_RN, PWM_UN=HIGH:GND									-16,00	-9,50	-5,00
switched on. Add an IGBT Gate-Emitter load, a 100nF±10% ceramic or metal foil		RUN_G21:RUN_E21@PWM_RN, PWM_UN= LOW :GND									14,00	15,70	17,00
capacitor must be connected between the measuring points: IGBT Gate to IGBT Emitter		SVP_G11:SVP_E11@PWM_SP, PWM_VP=HIGH:GND									-16,00	-9,50	-5,00
RUP_G11 : RUP_E11, RUN_G21 : RUN_E21 SVP_G11 : SVP_E11, SVN_G21 : SVN_E21		SVP_G11:SVP_E11@PWM_SP, PWM_VP= LOW :GND	V								14,00	15,70	17,00
TWP_G11 : TWP_E11, TWN_G21 : TWN_E21		SVN_G21:SVN_E21@PWM_SN, PWM_VN=HIGH:GND									-16,00	-9,50	-5,00
short circuit: IGBT Collector to IGBT Emitter		SVN_G21:SVN_E21@PWM_SN, PWM_VN=LOW:GND									14,00	15,70	17,00
RUP_C1 : RUP_E11 : RUN_E21 SVP_C1 : SVP_E11 : SVN_E21		TWP_G11:TWP_E11@PWM_TP, PWM_WP=HIGH:GND TWP G11:TWP E11@PWM TP, PWM WP=L OW :GND							_		-16,00 14,00	-9,50 15,70	-5,00 17,00
TWP_C1 : TWP_E11 : TWN_E21		TWP_G11:1WP_E11@PWM_IP, PWM_WP=LOW:GND TWN G21:TWN E21@PWM TN, PWM WN=HIGH:GND									14,00	-9,50	-5,00
2.) only GAA26800MX2 OUT EN CONV:GND set to HIGH level		TWN G21:TWN E21@PWM_TN, PWM_WN=HIGH:GND TWN G21:TWN E21@PWM TN, PWM WN=L OW :GND									-16,00 14,00	-9,50 15,70	17,00
555617744115 561 to 111411 16401											,50	,. 0	,

 All measuring instruments must be calibrated!!! As an additional document, the circuit diagram of the PCBA is requined. All measuring points: reference points are described in kind of netnet. PBX_BIDI alternatively assembled with CONVERTER- or INVERTE test cases only for PBX_BIDI, INVERTER-FUNCTIONALITY, test cases only for PBX_BIDI, CONVERTER-FUNCTIONALITY, test cases not required for GAA26800MX1, GAA26800MX2, Highly Accelerated Life Test, test cases required for HALT, marked 	ames, to ER-FUN GAA268 GAA268	CTIONALITY 800MX1, marked with note: 1 800MX2, marked with note: 2 marked with note: 4			Sar	mples					Value range wer Specification L	
		st cases		Boa	rd Se	rial N	umber	_	_	LSL	Typical	USL
Description	note	measuring point : reference point @ specified condition	unit									
PRIVER_RESET_N logic low pulse width Description of the function: ICPL316J FAULT* changes from a high impedance state to a logic low, if the voltage on the HCPL316J DESAT pin exceeding an internal reference voltage of solve will be used to solve the IGBT is on. ICPL316J FAULT* output remains low until HCPL316J RESET* to brought low. HCPL316J FAULT* output is an open ollector which allows the FAULT* outputs or all HCPL-316Js to be connected together in a "wired OR" orming the signals: IAA26800MX1: OCT_INV referenced to GND IAA26800MX2: CNV_OC_FLT referenced to GND When one of the six HCPL316J FAULT* outputs change to low, the ICPL316J RESET* input will change to low after a time delay of th DRIVER_RESET_N logic low pulse width"	le	GAA26800MX1: OCT_INV referenced to GND GAA26800MX2: CNV_OC_FLT referenced to GND HIGH pulse width @open only short circuit RUP_C1 : RUP_E11 GAA26800MX1: OCT_INV referenced to GND GAA26800MX2: CNV_OC_FLT referenced to GND HIGH pulse width @open only short circuit RUP_E11 : RUN_E21								200	360 360	50
reparation: .) all drivers must be stimulated such that a connected IGBT would be witched on. by RP=LOW:GND, PWM_UP=LOW:GND by RN=LOW:GND, PWM_UN=LOW:GND by RN=LOW:GND, PWM_VP=LOW:GND by RN=LOW:GND, PWM_VN=LOW:GND by RN=LOW:GND, PWM_WP=LOW:GND by RN=LOW:GND, PWM_WP=LOW:GND by RN=LOW:GND, PWM_WP=LOW:GND by RN=LOW:GND, PWM_WP=LOW:GND by RN=LOW:GND, PWM_WN=LOW:GND		GAA26800MX1: OCT_INV referenced to GND GAA26800MX2: CNV_OC_FLT referenced to GND HIGH pulse width @open only short circuit SVP_C1 : SVP_E11								200	360	50
.) .) .) .) .) .) .dd an IGBT Gate-Emitter load, a 100nF±10% ceramic or metal foil apacitor must be connected between the measure points: .] .] .] .] .] .] .] .] .] .] .] .] .]		GAA26800MX1: OCT_INV referenced to GND GAA26800MX2: CNV_OC_FLT referenced to GND HIGH pulse width @open only short circuit SVP_E11 : SVN_E21	ms							200	360	5
GBT Collector to IGBT Emitter KUP_C1: RUP_E11, RUP_E11: RUN_E21 KVP_C1: SVP_E11, SVP_E11: SVN_E21 WP_C1: TWP_E11, TWP_E11: TWN_E21 .) nly GAA26800MX2 DUT_EN_CONV:GND set to HIGH level timulation:		GAA26800MX1: OCT_INV referenced to GND GAA26800MX2: CNV_OC_FLT referenced to GND HIGH pulse width @open only short circuit TWP_C1: TWP_E11								200	360	50
timulation: DESAT pins are executed successively by open inly one of the short circuit "IGBT Collector to IGBT Emitter" or approximate 60ms. Geep a wait time condition to the next test case of pproximate 500ms. Ill tests must be processed 2 times sequentially, in order to guarantee that no latch up effect appears.		GAA26800MX1: OCT_INV referenced to GND GAA26800MX2: CNV_OC_FLT referenced to GND HIGH pulse width @open only short circuit TWP_E11: TWN_E21								200	360	50

Test Requirement for PBX_BIDI GAA26800MX 1. All measuring instruments must be calibrated!!! 2. As an additional document, the circuit diagram of the PCBA is require 3. All measuring points : reference points are described in kind of netna 4. PBX_BIDI alternatively assembled with CONVERTER- or INVERTER test cases only for PBX_BIDI, INVERTER-FUNCTIONALITY, G test cases only for PBX_BIDI, CONVERTER-FUNCTIONALITY, G test cases not required for GAA26800MX1, GAA26800MX2. 5. Highly Accelerated Life Test, test cases required for HALT, marked of the content o	mes, t R-FUN AA266 AA266	CTIONALITY 300MX1, marked with note: 1 800MX2, marked with note: 2 marked with note: 4						Sam	ıples					
		Samples Samples Samples Samples Lower Specification Limit Upper Specification Upper Spec					USL							
Description	note	measuring point : reference point @ specified condition	unit											
POWER FAIL MONITORING thresholds PFAIL_RS_CONV signal changes from 1.) statical LOW level 2.) TOGGLE between LOW and HIGH 3.) statical HIGH level	2	Decrease US from 7.4Vpp until PFAIL_RS_CONV threshold changes from										1,00	1,30	4,76
Umax_line_to_line=480V*1.1 resultant max. voltage range: ±3.7V (Vpp=7.4V) Umin_line_to_line=340V resultant min. voltage: Vpp=4.76V		Decrease US from 7.4Vpp until PFAIL_RS_CONV threshold changes from	Vpp									0,30	0,70	1,00
preparation: adjustable sinus voltage supply 7.4Vpp@50Hz, offset=0V to US / GND_SENSE														
Hall Effect Comment Connec		CENCE ID CENCE III. CNDA										1.00	0.00	1,00
Hall Effect Current Sensor LEM: LA200-P TAMURA: S26P200D15Y		output-current @ 0A										·	·	,
VAC: T60404-N4646-X201 current conversion ratio: 1:2000 measure the output-current at a given input-current												0,80	1,00	1,20
preparation: Apply R=60ohm between:												-1,20	-1,00	-0,80
SENSE_IR, SENSE_IU and GNDA SENSE_IS, SENSE_IV and GNDA			mA									-1,00	0,00	1,00
Input-current source cable put through the hole once. Polarity markings:												0,80	1,00	1,20
A positive measuring output-current is obtained on terminal M (pin 2), when the primary input-current flows in the direction of the arrow.		SENSE_IS, SENSE_IV : GNDA LEM_IS_output-current @ -2A										-1,20	-1,00	-0,80
CHG-RELAY contact resistance	2	R_RES:RUO@REL1, REL2: contacts opened											contacts opened	
preparation: OUT_EN_INV:GND set to HIGH level		R_RES:RUO@REL1, REL2: contacts closed				Ī	_						contacts closed	
OUT_EN_CONV:GND set to HIGH level REL1, REL2: contacts closed CHRG_N:GND to LOW		S_RES:SVO@REL1, REL2: contacts opened	or NO										contacts opened	
REL1, REL2: contacts opened CHRG_N:GND to HIGH		S_RES:SVO@REL1, REL2: contacts closed											contacts closed	

Test Requirement for PBX_BIDI GAA26800MX											
 All measuring instruments must be calibrated!!! As an additional document, the circuit diagram of the PCBA is required. All measuring points: reference points are described in kind of netnatively assembled with CONVERTER- or INVERTER test cases only for PBX_BIDI, INVERTER-FUNCTIONALITY, Government of the content of the conten	mes, test points or component designator. R-FUNCTIONALITY 6AA26800MX1, marked with note: 1 6AA26800MX2, marked with note: 2 marked with note: 4			Sa	ımples	.			Low	Value range er Specification Li er Specification Li	
	Test cases		E	Board S	erial N	umbe	er		LSL	Typical	USL
Description	measuring point : reference point @ specified condition	unit									
VRS, VST	2 REF_SEC / GNDA (±10%)								-2017,40	-1834,00	-1650,60
voltage gain calibration and	equation: 5V*-0.4115*0.89111=-1.83356V measuring point: DC_VRS / SGND (±10%)								1852,20	2058,00	2263,80
transfer gain K3 (plausibility) check	signal: VRS_DC_N / GND_SENSE measuring point: VRS / AGND (±25%) signal: VRS_OUT_DC_N / GNDA equation: 2.0576V*0.89111=1.8335V	mV							1375,50	1834,00	2292,50
Linear Optocoupler GAA629CL1	measuring point: VRS_N / AGND								-1500,00	0,00	1500,00
Vendor Vishay: IL300-EF-X017T transfer gain K3 = 0.851 - 1.061 ± 0.5% Tamb = 0 ℃ to 75 ℃	signal: VRS_OUT_N / GNDA transfer gain K3_VRS (plausibility) check							+	0,80	1,00	1,10
Vendor Agilent / Avago: HCNR201 transfer gain K3 = 0.93 - 1.07	proceeding: calculate with the following equation: K3_VRS=VRS_OUT_DC_N / (0.89111*VRS_DC_N)										
	measuring point: DC_VST / SGND (±10%) signal: VST_DC_N / GND_SENSE								1852,20	2058,00	2263,80
	measuring point: VST / AGND (+-25%) signal: VST_OUT_DC_N / GNDA equation: 2.0576V*0.89111=1.8335V	mV							1375,50	1834,00	2292,50
	measuring point: VST_N / AGND signal: VST_OUT_N / GNDA								-1500,00	0,00	1500,00
	transfer gain K3_VST (plausibility) check							+	0,80	1,00	1,10
	proceeding: calculate with the following equation: K3_VST= VST_OUT_DC_N / (0.89111*VST_DC_N)										
IGBT TEMPERATURE MEASUREMENT and transfer gain K3 (plausibility) check preparation: measure with connected resistor 5kohm, ±0.1% between NTC1 / NTC2	NTC1:NTC2 (1.86V±10%) measuring point: TEMP_IGBT / GNDA signal: TEMP_IGBT / GNDA equation: typical: (3.107V*0.89111)-0.7258=2.04V with gain range IL300: 0.81.2 min.: (0.8*2.77V)-0.7258=1.49V (-3% = 1.445V) max.: (1.2*2.77V)-0.7258=2.6V (+3% = 2.68V)								1670,00 1445,00	1860,00 2040,00	2050,00 2680,00
	InvTempUn (Addr.: 0x12) CnvTempUn (Addr.: 0x12) measuring point: TEMP_UN / GNDA signal: TEMP_UN / GNDA	mV							1080,00	1200,00	1320,00
	InvTempUin (Addr.: 0x14) CnvTempUin (Addr.: 0x14) preparation: measure with connected resistor 5kohm between NTC1 / NTC2 measuring point: NTC1 / SGND signal: NTC1 / GND_SENSE								2950,00	3110,00	3270,00
	transfer gain K3_TEMP (plausibility) check proceeding: calculate with the following equation: K3_TEMP= (TEMP_IGBT+(TEMP_UN*0.604)) / (NTC1*0.89111)								0,80	1,00	1,10
									2222.22	2000.00	0.400.00
DC-LINK VOLTAGE MEASUREMENT and transfer gain K3 (plausibility) check	1 InvUdclUin (Addr.: 0x18) measuring point: DC_ME / GND_SENSE signal: DC_ME / GND_SENSE equation: typical: 1.2V*2.4864=3V								2900,00	3000,00	3100,00
preparation:	InvUdclUout (Addr.: 0x1A) measuring point: UDCL / GNDA signal: UDCL / GNDA equation:	mV							2070,00	2673,00	3220,00
1.) CALIBRATED precision DC voltage reference OUTPUT VOLTAGE: +1.2V ±0.2% max LOW NOISE: 10µVPP max (0.1Hz to 10Hz) conecetd to DCP_U_ME_1 / GND_SENSE	typical: 3V*0.89111=2,673V with gain range IL300: 0.81.2 min.: 0.8*2,673V=2.138V (-3% = 2.07V) max.: 1.2*2,673V=3.208V										
2.) short circuit is needed between DCN U ME 1/GND SENSE	(+3% = 3.22V) transfer gain K3_UDC (plausibility) check proceeding: calculate with the following equation: K3_UDC= UDCL / (0.89111*DC_ME)								0,80	1,00	1,10

As an additional document, the circuit diagram of the PCBA is requal measuring points: reference points are described in kind of net PBX_BIDI alternatively assembled with CONVERTER- or INVERT test cases only for PBX_BIDI, INVERTER-FUNCTIONALITY, test cases only for PBX_BIDI, CONVERTER-FUNCTIONALITY, test cases not required for GAA26800MX1, GAA26800MX2, Highly Accelerated Life Test, test cases required for HALT, marke	names, t ER-FUN GAA26 , GAA26	CTIONALITY 800MX1, marked with note: 1 800MX2, marked with note: 2 marked with note: 4						Sam	ples						Value range wer Specification L per Specification L	
Description		est cases measuring point : reference point	1			E	Board	Seri	al Nu	ımbe	r			LSL	Typical	USL
	note	@ specified condition	unit													
ardware-dependent		InvTempUref (Addr.: 0x10)														
mming values		CnvTempUref (Addr.: 0x10) values margin: 140001500016000														
sumed measured values, see table above, Iculated on values in [mV]		InvTempUn (Addr.: 0x12) CnvTempUn (Addr.: 0x12)														
be storing in the EPROM		values margin: 100012021500 InvTempUin (Addr.: 0x14)														
w bytes from trimming values must be written into the lower dresses.		CnvTempUin (Addr.: 0x14) values margin: 161331073596														
AA26800MX1: I2C DEVICE Addr.: # 2		InvTempUout (Addr.: 0x16)														
AA26800MX2: I2C DEVICE Addr.: # 4 C bus lines:		CnvTempUout (Addr.: 0x16) values margin: 110027693784														
AA26800MX1: I2C_SCL0_INV, I2C_DA0_INV AA26800MX 2 : I2C SCL0 CONV, I2C DA0 CONV		proceeding: calculate with the following equation:														
so to be storing, informations from the board assigned label:		InvTempUout= TEMP_IGBT+9060/15000*InvTempUn CnvTempUout= TEMP_IGBT+9060/15000*CnvTempUn														
to be storing, informations from the board assigned label.	1	InvUdcIUin (Addr.: 0x18)														
		values margin: 274330003242														
	2	CnvVrsUinDC (Addr.: 0x18) values margin: 450050005500														
S/N:MX1093400021		proceeding: calculate with the following equation:														
P/N:G1A26800MX1A-LF		CnvVrsUinDC=VRS_DC_N*2.43														
REV:2009-07-22	<u> </u>	InvUdclUout (Addr.: 0x1A) values margin: 187026673412														
	2	CnvVrsUoutDC (Addr.: 0x1A) values margin: 350044555400	mV													
		proceeding: calculate with the following equation:														
		CnvVrsUoutDC=VRS_OUT_DC_N*2.43														
S/N:MX2093400014	2	CnvVrsUout (Addr.: 0x1C) values margin: -150001500														
P/N:G1A26800MX2A-LF		constraint: if (VRS OUT N < 0) write (65536 - abs(VRS OUT N))														
REV:2009-07-22		and if (VRS_OUT_N >= 0) then write CnvVrsUout equal to VRS_OUT_N wit mV unit.														
	2	CnvVstUinDC (Addr.: 0x1E)														
AA26800MX1: Package code: 00 = 20 (dez)		values margin: 450050005500														
AA26800MX1: voltage code:		proceeding: calculate with the following equation:														
02 = 4 (dez)	2	CnvVstUinDC=VST_DC_N*2.43 CnvVstUoutDC (Addr: 0x20)														
AA26800MX1: power code:		values margin: 350044555400 proceeding:														
04 = 120 (dez)		calculate with the following equation: CnvVstUoutDC=VST_OUT_DC_N*2.43														
AA26800MX1: Drive version number: 06 = 2 (dez)	2	CnvVstUout (Addr: 0x22)														
		values margin: -150001500 constraint:														
CB serial number S/N: 01000x010F		if (VST_OUT_N < 0) write (65536 - abs(VST_OUT_N)) and if (VST_OUT_N >= 0) then write CnvVstUout equal to VST_OUT_N with														
-byte; ASCII string; left-aligned; st bytes filled with spaces		mV unit.														
rcode; Otis definition; e.g. AA26800MX1: "MX1093400021 "	1	InvManufTestId (addr: 0x1C) must be set to enable the trimming parameter with set 0xDEC0 after end of														
AA26800MX 2 : "MX 2 093400014 "		hardware test&calibration addr: 0x1C data: C0														
		addr: 0x1C data: C0														
CB part number P/N: 0120 bis 0x012F	2	CnvManufTestId (addr: 0x24)											\square			
-byte; ASCII string; left-aligned; st bytes filled with spaces		must be set to enable the trimming parameter with set 0xDEC0 after end of	HEX													
rcode; Otis definition; e.g.		hardware test&calibration addr: 0x24 data: C0														
^A26800MX1: "GAA26800MX1A-LF " ^A26800MX 2 : "GAA26800MX 2 A-LF "		addr: 0x25 data: DE														
eparation:																
JT EN INV:GND set to HIGH level				1	İ	1	1	i l			1	1	ı 1			