



**COMPLIANCE
ENGINEERING**

EMC Product Safety Environmental Shielding

90 Indian Drive
Keysborough VIC 3173 Australia
Telephone: + 61 3 9763 3079
Email: info@compeng.com.au
Web: www.compeng.com.au
ABN: 96 668 483 574

EMC Compliance Test Report

CFR 47, Chapter 1, Subpart A,
Part 15, Subpart B

Report Number: CE4774B

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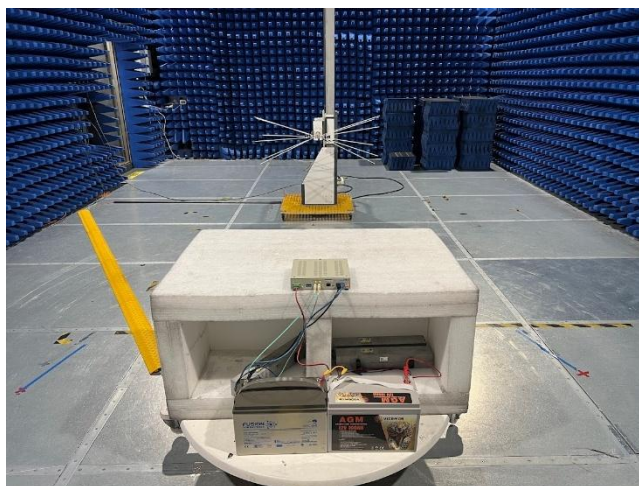


TMEIC Process Technology Application Centre P/L
B0EMCB08 Real Time Ethernet
Model: PN912

The results detailed in this test report relate only to the specific sample/s tested. It is the Manufacturer's responsibility to ensure that all production units are manufactured with equivalent EMC characteristics. This report is not to be reproduced except in full, without written approval from Compliance Engineering

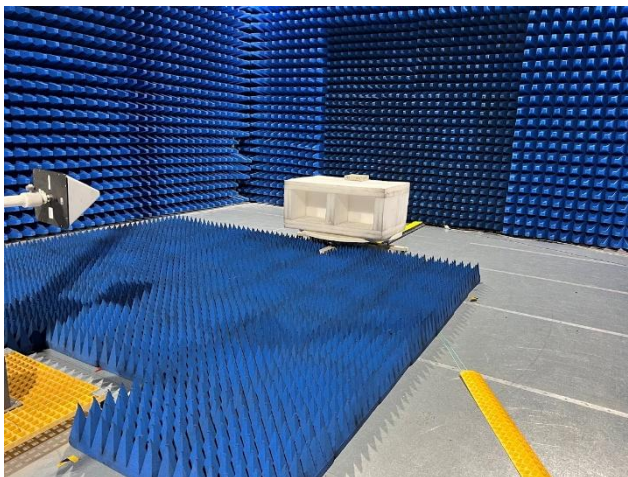
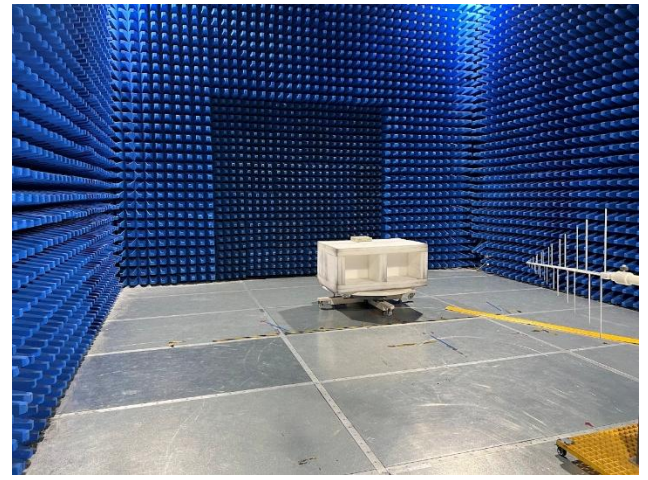
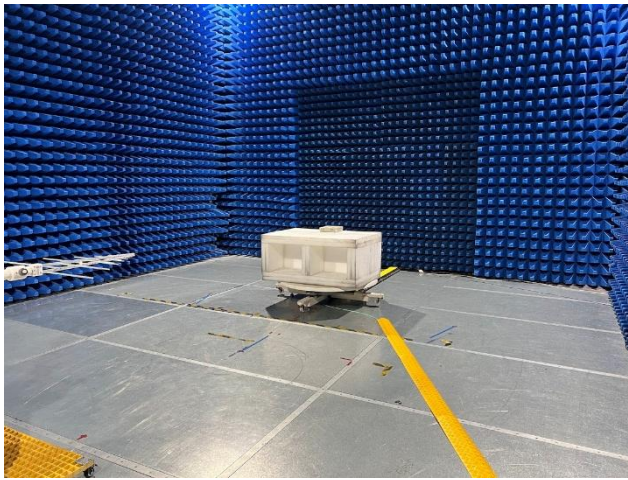
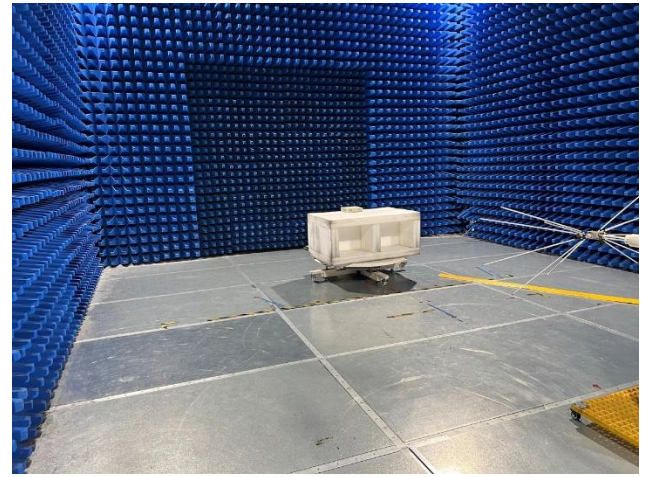
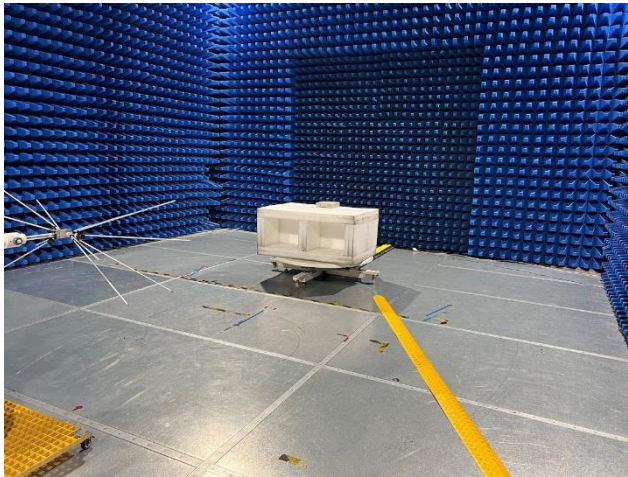


RAS Data to Tcnet				TB=TCnetIO StnNumber										
Tcnet	Block	Word	Bit	Name	Type	Size	TcnetSpeed	Gateway	DeviceType	SubDevice	Instance	Word	Bit	Description
R	0	0	0	L PNTR_COUNTER	INT	1	MS	TRENZ	MetaData	0	0	0	0	16 bit Counter at 100msec rate
R	1	0	0	L PNTR_SPARE1	INT	1	MS	TRENZ	MetaData	0	0	0	0	Spare for future = 0
R	2	0	0	L PNTR_IU	WORD	1	MS	TRENZ	MetaData	U	U	U	U	Gateway PN912 IU (0x004E) = "PN"
R	3	0	0	L PNTR_MAJOR_REV	INT	1	MS	TRENZ	MetaData	0	0	0	0	Gateway TMGW Program major rev
R	4	0	0	L PNTR_MINOR_REV	INT	1	MS	TRENZ	MetaData	0	0	0	0	Gateway TMGW Program minor rev
R	5	0	0	L PNTR_PTEMP	INT	1	MS	TRENZ	MetaData	0	0	0	0	PL Core temperature [degC*10]
R	6	0	0	L PNTR_PSTEMP	INT	1	MS	TRENZ	MetaData	0	0	0	0	PS Core Temperature [degC*10]
R	7	0	0	L PNTR_TEMP_1	INT	1	MS	TRENZ	MetaData	0	0	0	0	Module temperature [degC*10]
R	8	0	0	L PNTR_TEMP_2	INT	1	MS	TRENZ	MetaData	0	0	0	0	Ambient Case Temperature [degC*10]
R	9	0	0	L PNTR_MVOLTS	INT	1	MS	TRENZ	MetaData	0	0	0	0	Trenz Module Voltage [Volts*1000]
R	10	0	0	L PNTR_MAMPS	INT	1	MS	TRENZ	MetaData	0	0	0	0	Trenz Module Current [Amps*1000]
R	11	0	0	L PNTR_MPOWER	INT	1	MS	TRENZ	MetaData	0	0	0	0	Trenz Module Power [Watts*1000]
R	12	0	0	L PNTR_SERIALNO	ARRAY[0..2] OF WORD	3	MS	TRENZ	MetaData	0	0	0	0	Main board serial number
R	15	0	0	L PNTR_FPGAFLW	WORD	1	MS	TRENZ	MetaData	0	0	0	0	FPGA Firmware version (low word)
R	16	0	0	L PNTR_FPGAFLWH	WORD	1	MS	TRENZ	MetaData	0	0	0	0	FPGA Firmware version (high word)
R	17	0	0	L PNTR_TYPEVER	WORD	1	MS	TRENZ	MetaData	0	0	0	0	Mainboard type/ver
R	18	0	0	L PNTR_IFJ	WORD	1	MS	TRENZ	MetaData	0	0	0	0	Daughterboard version(0=no dli)
R	19	0	0	L PNTR_SPARE2	WORD	1	MS	TRENZ	MetaData	0	0	0	0	Spare for future = 0
R	20	0	0	L PNCO_COFSTATE	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Communication Change of State
R	22	0	0	L PNCO_CSTATE	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Communication State
R	24	0	0	L PNCO_CERROR	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Communication Error
R	26	0	0	L PNCO_VERSION	WORD	1	MS	COMX_CS	MetaData	0	0	0	0	Version
R	27	0	0	L PNCO_WDTIMEOUT	WORD	1	MS	COMX_CS	MetaData	0	0	0	0	Watchdog Timeout
R	28	0	0	L PNCO_HOSTWD	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Host Watchdog
R	30	0	0	L PNCO_ERRCOUNT	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Error Count
R	32	0	0	L PNCO_ERRLOGIND	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Error Log Indicator
R	34	0	0	L PNCO_SLVSTATE	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Slave State
R	36	0	0	L PNCO_SLVERRLOGIND	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Slave Error Log Indicator
R	38	0	0	L PNCO_CFGSLAVES	DWORD	2	MS	COMX_CS	MetaData	U	U	U	U	Configured Slaves
R	40	0	0	L PNCO_ACTSLAVES	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Active Slaves
R	42	0	0	L PNCO_FLTSLAVES	DWORD	2	MS	COMX_CS	MetaData	0	0	0	0	Faulted Slaves
R	44	0	0	L PNNX_MVOLTS	INT	1	MS	COMX	MetaData	0	0	0	0	Netx Module Voltage [Volts*1000]
R	45	0	0	L PNNX_MAMPS	INT	1	MS	COMX	MetaData	0	0	0	0	Netx Module Current [Amps*1000]
R	46	0	0	L PNNX_MPOWER	INT	1	MS	COMX	MetaData	0	0	0	0	Netx Module Power [Watts*1000]
R	47	0	0	L PNNX_TIMESTRT	INT	1	MS	COMX	MetaData	0	0	0	0	Netx Module Time Since Start [Sec]
R	48	0	0	L PNNX_CPULD	INT	1	MS	COMX	MetaData	0	0	0	0	Netx Module CPU Load [Percent*10]
R	49	0	0	L PNNX_SPARE	INT	1	MS	COMX	MetaData	0	0	0	0	Spare for future = 0
R	50	0	0	L PNTC_RSRTIM	DWORD	2	MS	TCNETIO	MetaData	0	0	0	0	TCnetIO (0x09c) SYN orbit real time in units of msec
R	52	0	0	L PNTC_WAOKCT	DWORD	2	MS	TCNETIO	MetaData	0	0	0	0	TCnetIO (0x1b0) A circuit OK counter
R	54	0	0	L PNTC_WBOKCT	DWORD	2	MS	TCNETIO	MetaData	0	0	0	0	TCnetIO (0x1b4) B circuit OK counter
R	56	0	0	L PNTC_WANCDCCT	DWORD	2	MS	TCNETIO	MetaData	0	0	0	0	TCnetIO (0x1b8) A circuit LRR counter
R	58	0	0	L PNTC_WBNCDCCT	DWORD	2	MS	TCNETIO	MetaData	U	U	U	U	TCnetIO (0x1bc) B circuit LRR counter
R	60	0	0	L PNTC_WACRCCT	DWORD	2	MS	TCNETIO	MetaData	0	0	0	0	TCnetIO (0x1c0) A circuit error counter
R	62	0	0	L PNTC_WBRCRCCT	DWORD	2	MS	TCNETIO	MetaData	0	0	0	0	TCnetIO (0x1c4) B circuit error counter



6.1. Supporting Equipment Used During Testing

AE: Auxiliary/Associated Equipment				
Device	Manufacturer	Model No:	Serial	Comments
Real Time Ethernet Gateway	TMEIC	PN912	PN912c-004	Support Equipment for data logging
PC	N/A	N/A	TMWRK13	For ODG server data logging



4. MODIFICATIONS

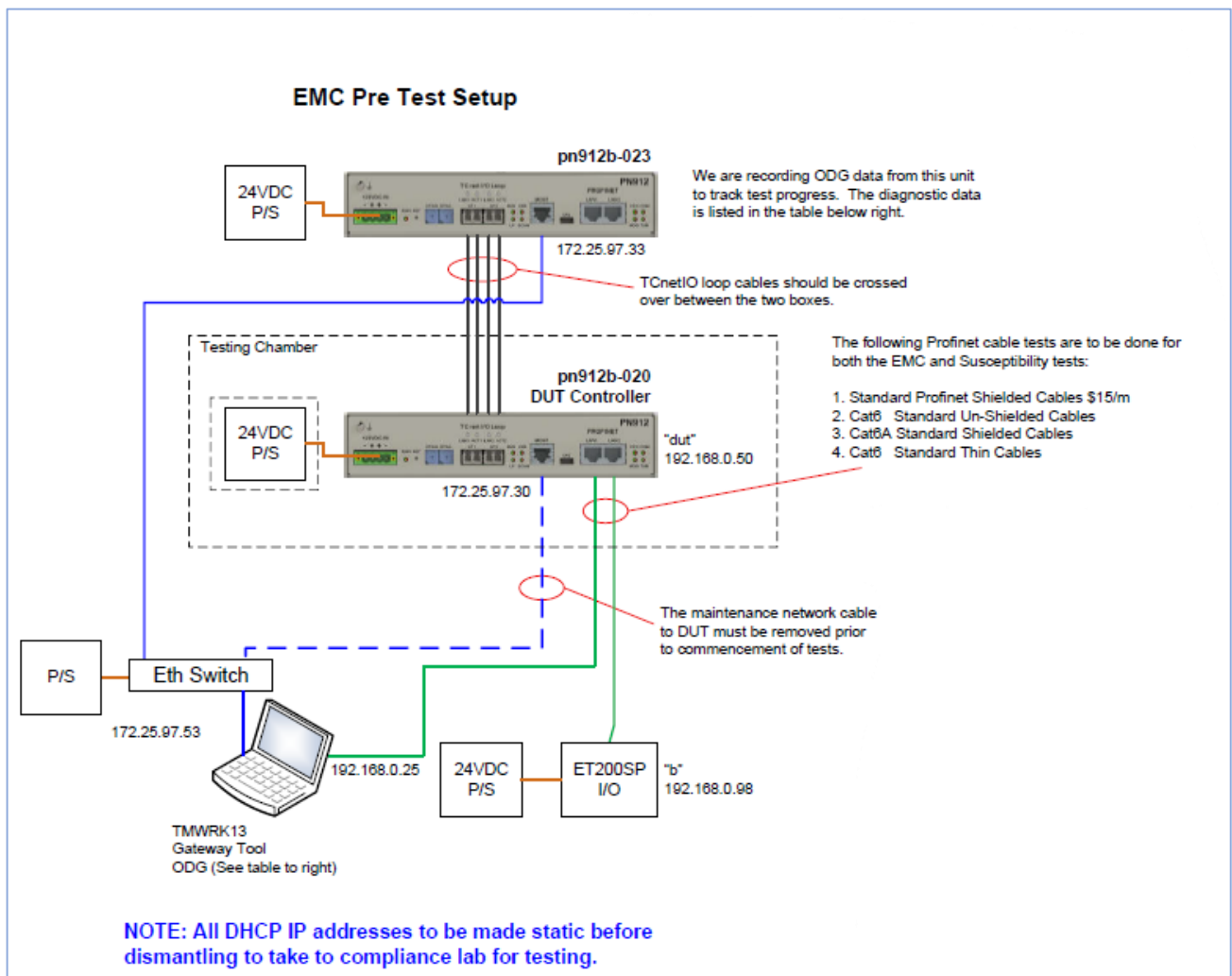
No modification was performed.

5. STANDARD DEVIATIONS

No deviations from the standard were made.

6. CONFIGURATION

The B0EMCB08 Real Time Ethernet (Model: PN912) was powered at 24VDC via two 12V batteries.



The EUT (Serial: PN912c-005) was communicating with a companion unit (Serial: PN912c-004). A datalogging server (ODG) was used to capture all the activity. All the parameters listed below in the table were captured and recorded.

Plots of the accumulated measurement data, including all transducer correction factors were produced and stored to file.

Measurements below 1 GHz:

RWB = 120 kHz, VBW = 3 x RBW

Measurements above 1 GHz:

RF absorber is placed on the ground reference plane between the EUT and the measuring antenna and its location size should allow the test site area comply with the CISPR 16-1-4 requirements.

RWB = 1 MHz (minimum), VBW = 3 x RBW

