



1 **TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 17ATEX4362X** Issue: **2**

4 Equipment: **Panel PC, Display, or Box PC - AEx-2813xx**

5 Applicant: **Aplex Technology .**

6 Address: 15F-1, No. 186
Jian Yi Road
Zhonghe Dist.
New Taipei City
235 Taiwan, R.O.C.

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V. certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 3 equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012/A11:2013

EN 60079-11:2012

EN 60079-15:2010

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:

Display and Panel PC series



II 3G
Ex nA ic IIC T4 Gc
Ta = -20°C to +60°C

Box PC series



II 3G
Ex nA IIC T4 Gc
Ta = -20°C to +60°C

Project Number 0670

Signed: 

Title: Director of Operations

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CSA Group Netherlands B.V.
Utrechtseweg 310,
6812 AR, Arnhem,
Netherlands



SCHEDULE

TYPE EXAMINATION CERTIFICATE

Sira 17ATEX4362X
Issue 2

13 DESCRIPTION OF EQUIPMENT

The AEx-series is a fanless, panel-mounted or stand-alone device for data collection and processing, with a touchscreen display (except model AEx-2410 or AEx-2411). It is housed in a stainless steel enclosure. It has facilities for connection to suitably-certified external devices.

The product is divided into 3 model series: Display, Panel PC, and Box PC

		Equipment Name / Model Number			
		Display	Panel PC		Box PC
		AEx-1xxPx	AEx-8xxPx	AEx-9xxAPx	AEx-241x
Panel specification	15 h	AEx-115P	AEx-815P	AEx-915AP	--
	15 h, high brightness	AEx-115PH	AEx-815PH	AEx-915APH	--
	15.6 h	AEx-116P	AEx-816P	AEx-916AP	--
	19 h	AEx-119P	AEx-819P	AEx-919AP	--
	19 h, high brightness	AEx-119PH	AEx-819PH	AEx-919APH	--
	21.5 h	AEx-121P	AEx-821P	AEx-921AP	--
	No display	--	--	--	AEx-2410, AEx-2411
		TB-6029	SBC-7111	SBC-7114	SBC-7111 or SBC-7114
Mainboard P/N					

All models are rated 9-36 Vdc, 13-3 A, 90 W maximum.

Variation 1 - This variation introduced the following changes:

- i. Addition of some components to mainboards and small converting boards.
- ii. Addition of 3 LCD panel sources.
- iii. Controlled documents revision.
- iv. Updating certification code of BOX PC.
- v. The marking was amended to recognise the certification codes for the Display and Panel PC series and the Box PC series.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	04 December 2017	R70104059A	The release of the prime certificate.
1	22 February 2019	R70193277A	The introduction of Variation 1.
2	15th October 2019	0670	Transfer of certificate Sira 17ATEX4362X from Sira Certification Service to CSA Group Netherlands B.V..

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15 SPECIFIC CONDITIONS OF USE

- 15.1 In locations where high external humidity and internal temperature variations (e.g. frequent on-off cycles) may cause condensation inside the equipment, the interior should be periodically inspected.
- 15.2 When the device is mounted in a hazardous area, connection and disconnection of external connectors while live is only permitted if the potentially explosive atmosphere is shown to be absent.
- 15.3 The 9-36Vdc rated supply shall be protected such that transients are limited to a maximum of 119 V; no such protection is required for the signal lines.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed reports listed in Section 14.2.

Certificate Annexe



Certificate Number: Sira 17ATEX4362X

Equipment: Panel PC, Display, or Box PC - AEx-2813xx

Applicant: Apex Technology .

Issue 0

Drawing no.	Sheets	Rev.	Sira (Stamp date)	Description
x0141152813x	1 to 2	1	09 Nov 17	Overall & Exploded view of 15 h Display
x0149152813x	1 to 2	1	09 Nov 17	Overall & Exploded view of 15 h Panel PC
011491510001	1 of 1	1	09 Nov 17	15 h PANEL FRAME
011481510101	1 of 1	1	09 Nov 17	15 h LCD BKT L
011491510101	1 of 1	1	09 Nov 17	15 h LCD BKT R
060304000322	1 of 1	1	09 Nov 17	15 h PANEL, MID, BACK SPONGE
011491510301	1 of 1	1	09 Nov 17	15 h MID BKT
011491510801	1 of 1	1	09 Nov 17	15 h PANEL MOUNT BKT
x0141162813x	1 to 2	1	09 Nov 17	Overall & Exploded view of 15.6 h Display
x0149162813x	1 to 2	1	09 Nov 17	Overall & Exploded view of 15.6 h Panel PC
011481610301	1 of 1	1	09 Nov 17	15.6 h PANEL FRAME
011481610001	1 of 1	1	09 Nov 17	15.6 h LCD BKT
060304000342	1 of 1	1	09 Nov 17	15.6 h PANEL, MID, BACK SPONGE
011481610101	1 of 1	1	09 Nov 17	15.6 h MID BKT
011481610201	1 of 1	1	09 Nov 17	15.6 h PANEL MOUNT BKT R
011481610401	1 of 1	1	09 Nov 17	15.6 h PANEL MOUNT BKT L
x0141192813x	1 to 2	1	09 Nov 17	Overall & Exploded view of 19 h Display
x0149192813x	1 to 2	1	09 Nov 17	Overall & Exploded view of 19 h Panel PC
011491910001	1 of 1	1	09 Nov 17	19 h PANEL FRAME
011491910101	1 of 1	1	09 Nov 17	19 h LCD BKT
060304000340	1 of 1	1	09 Nov 17	19 h PANEL, MID, BACK SPONGE
011491910201	1 of 1	1	09 Nov 17	19 h MID BKT
011491910301	1 of 1	1	09 Nov 17	19 h PANEL MOUNT BKT
x0141212813x	1 to 2	1	09 Nov 17	Overall & Exploded view of 21.5 h Display
x0149212813x	1 to 2	1	09 Nov 17	Overall & Exploded view of 21.5 h Panel PC
011482110001	1 of 1	1	09 Nov 17	21.5 h PANEL FRAME
011482110301	1 of 1	1	09 Nov 17	21.5 h LCD BKT
011482110401	1 of 1	1	09 Nov 17	21.5 h LCD BKT/BOTTOM
060304000328	1 of 1	1	09 Nov 17	21.5 h PANEL, MID, BACK SPONGE
011482110501	1 of 1	1	09 Nov 17	21.5 h LCD BKT/TOP
011482110101	1 of 1	1	09 Nov 17	21.5 h MID FRAME
011482110201	1 of 1	1	09 Nov 17	21.5 h PANEL MOUNT BKT
x0142412813x	1 to 2	1	09 Nov 17	Overall & Exploded view of Box PC
011424100101	1 of 1	1	09 Nov 17	BOX PC FIXING BKT
011424100001	1 of 1	1	09 Nov 17	BOX PC BASE BKT
060304000353	1 of 1	1	09 Nov 17	BOX PC SPONGE
060304000307	1 of 1	1	09 Nov 17	LCD SPONGE (not related to ingress protection)
011491510401	1 of 1	1	09 Nov 17	BASE BKT
011491510701	1 of 1	1	09 Nov 17	OPS BKT
011491510601	1 of 1	1	09 Nov 17	HDD BKT
011491510901	1 of 1	1	09 Nov 17	HEATSINK PLATE
013596000002	1 of 1	2	09 Nov 17	BATTERY BKT

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Certificate Annexe



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Equipment: Panel PC, Display, or Box PC - AEx-2813xx

Applicant: Apex Technology .

Drawing no.	Sheets	Rev.	Sira (Stamp date)	Description
011491511001	1 of 1	1	09 Nov 17	CPU HEATSINK
011411510001	1 of 1	1	09 Nov 17	BACK COVER (Rear enclosure of Display)
011481510001	1 of 1	1	09 Nov 17	BACK COVER (Rear enclosure of Panel PC)
TB-6029	1 to 8	V1.00	09 Nov 17	Display board (P/N TB-6029) schematic
SBC-7111	1 to 91	V1.00	09 Nov 17	Mainboard (P/N SBC-7111) schematic
SBC-7114	1 to 92	V1.00	09 Nov 17	Mainboard (P/N SBC-7114) schematic
TB-547	1 to 1	V1.00	09 Nov 17	Connector convert board (between TB-xx and mainboard)
TB-548	1 to 1	V1.00	09 Nov 17	Connector convert board (between TB-xx and mainboard)
TB-555	1 to 1	1.1	09 Nov 17	Ex ic USB board
EXC31604254UAG	1 to 2	2017 0125	09 Nov 17	Circuit diagram of MILDEX OPTICAL . / PN: EXC31604254UAG
TB-540	1 to 5	0.1	09 Nov 17	Conversion board for AEx-2410 or AEx-2411
AEx_CCL	1 to 3	01	09 Nov 17	Critical Component List
AEx_INSF	1 to 1	01	09 Nov 17	Intrinsically safe diagram
070000005016	1 to 1	1	09 Nov 17	Label drawings
Other connectors	1 to 7	01	09 Nov 17	Control of connectors located on panel side and additional connector in BOX PC

Issue 1

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
SBC-7111	1 to 91	3.20	18 Feb 19	Mainboard (P/N SBC-7111) schematic
SBC-7114	1 to 95	2.2	18 Feb 19	Mainboard (P/N SBC-7114) schematic
TB-547	1 to 2	1.20	18 Feb 19	Connector convert board (between TB-555 and mainboard)
TB-548	1 to 1	V1.1	18 Feb 19	Connector convert board (between TB-555 and mainboard)
TB-555	9 of 12	V1.2	18 Feb 19	Ex ic USB board
AEx_CCL	1 to 4	02	18 Feb 19	Critical Component List
070000005016	1 to 1	1.0	18 Feb 19	Label drawings
TB-6029	1 to 8	F	18 Feb 19	Display board (P/N TB-6029) schematic
011481610301	1 to 1	2	18 Feb 19	15.6 h PANEL FRAME
011491910001	1 to 1	2	18 Feb 19	19 h PANEL FRAME

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