

Document: User Manual

Version: V1.0

Product: PCnP_Silverbox

Model name: AAA26838

Date: 02/09/2025

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Product Informations.doc [I] Page 1 of 29

Document History

Version ID	Document Status	Modified date	Modified by	Description
1.0	Draft	03.09.2025	Oscar Ochoa	Draft Version

1.1 Variants

The Silverbox has no variants in terms of mechanical design. The differentiation between the variants lies exclusively in the software, with two available Display variants: Display Kenworth and Display Peterbilt.

PCnP Silverbox Variant	Model Name	Model number
Kenworth	Control Device SB Kenworth	AAA2683870100
Peterbilt	Control Device SB Peterbilt	AAA2425110300

Table 1 Variants

1.2 Overview

The PCnP Silverbox is a control box that will be part of PACCAR Connect Platform.

PACCAR Connect Platform is a system comprised of two components; a SILVERBOX which is a cockpit domain controller, and a DISPLAY. This document serves as the user manual for the Silverbox.

1.3 Vehicle mounting

1.3.1 Mounting Orientation & Positioning

Silverbox is installed by the customer following the specified orientations and mounting angles to guarantee correct performance and compliance.

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 2 of 29

1.3.1.1 Mounting Angles Kenworth Dashboard

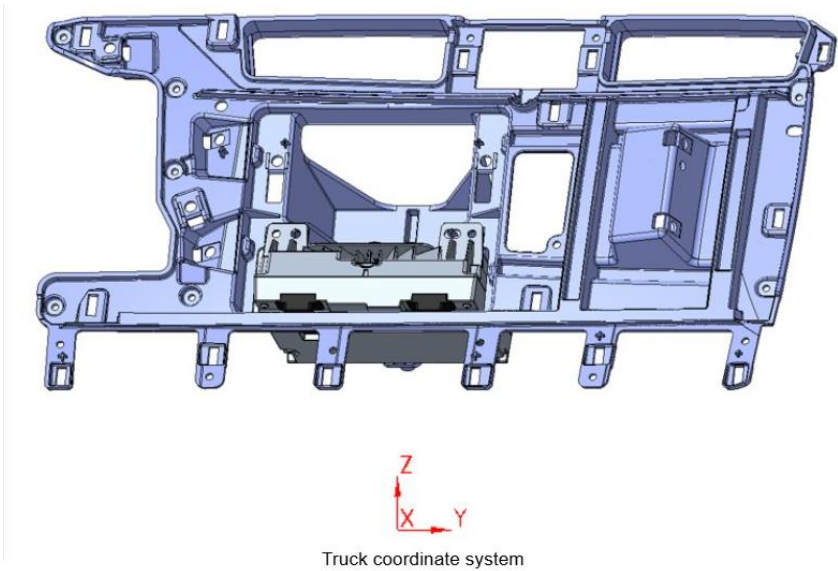


Figure 1.1 Silverbox Mounting Angles KW

$X-Y = 21.29^\circ$

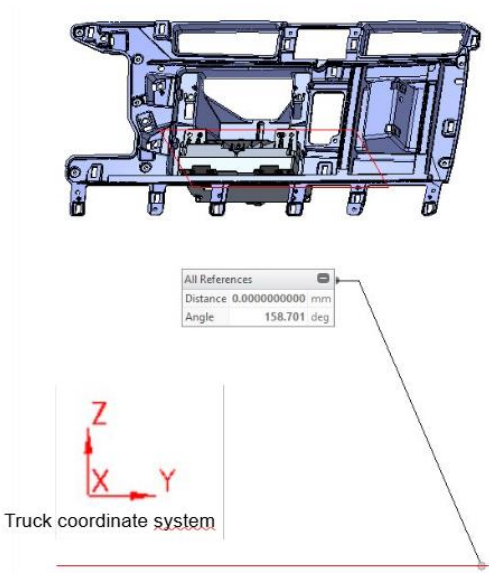


Figure 1.2 Silverbox Mounting Angles KW

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
 © Continental AG		Product Informations.doc [I]		Page 3 of 29

$Z-X = 13.15^{\circ}$

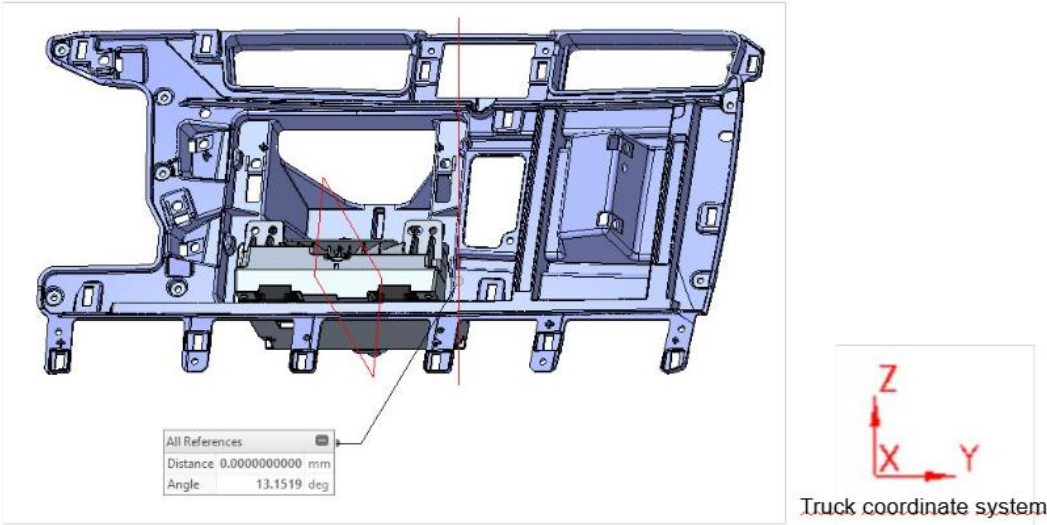


Figure 1.3 Silverbox Mounting Angles KW

$Y-Z = 24.87^{\circ}$

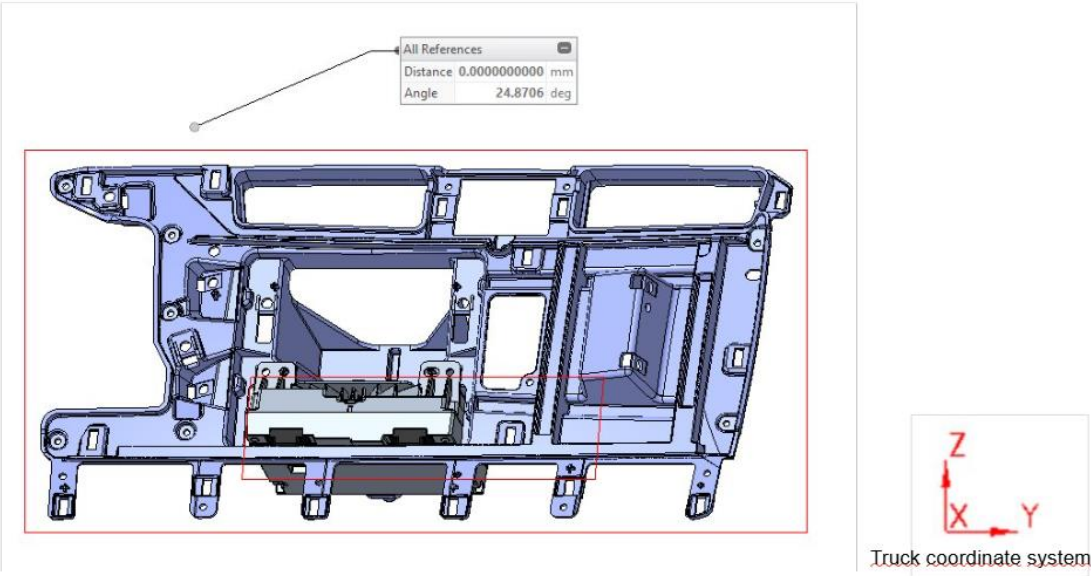


Figure 1.4 Silverbox Mounting Angles KW

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 4 of 29
		Product Informations.doc [I]		

1.3.1.2 Mounting Angles Peterbilt Dashboard

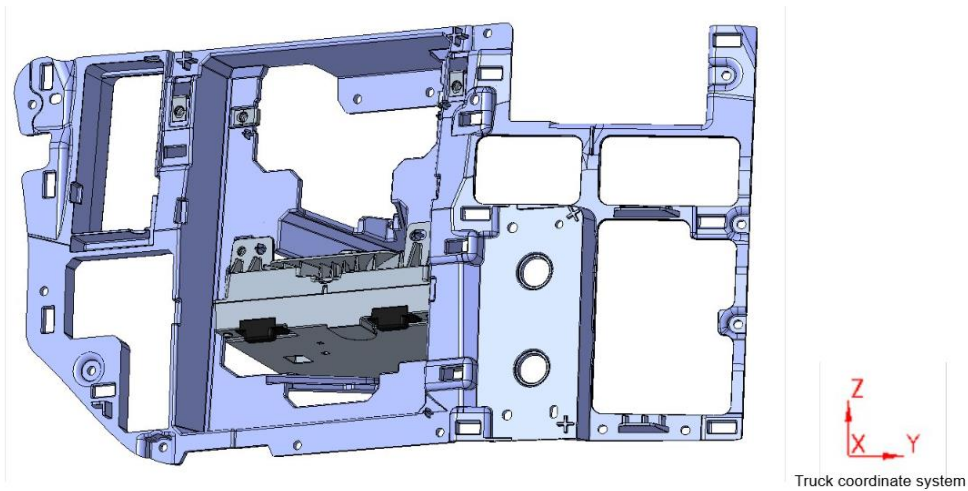


Figure 2.1 Silverbox Mounting Angles PB

$X-Y = 16.845^\circ$

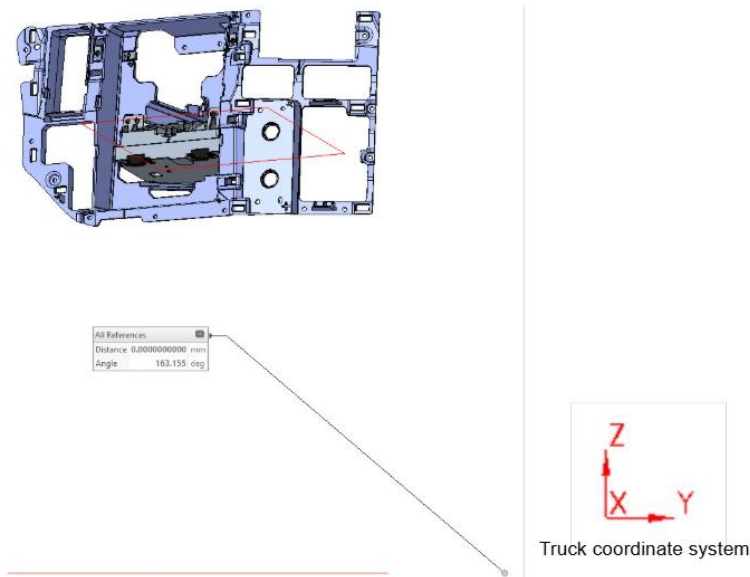


Figure 2.2 Silverbox Mounting Angles PB

Confidential		Internal	Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com			02.09.2025	SMY GDL SY SMY GDL SY	
	© Continental AG				Page 5 of 29
Product Informations.doc [I]					

Y-Z = 33.229°

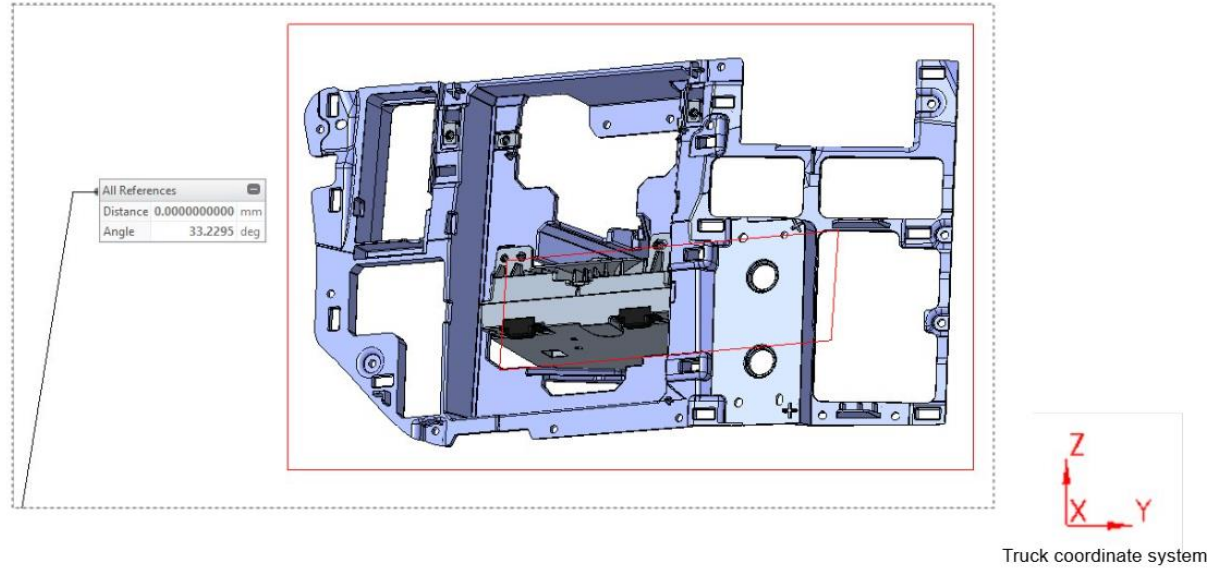


Figure 2.3 Silverbox Mounting Angles PB

Z-X = 28.438°

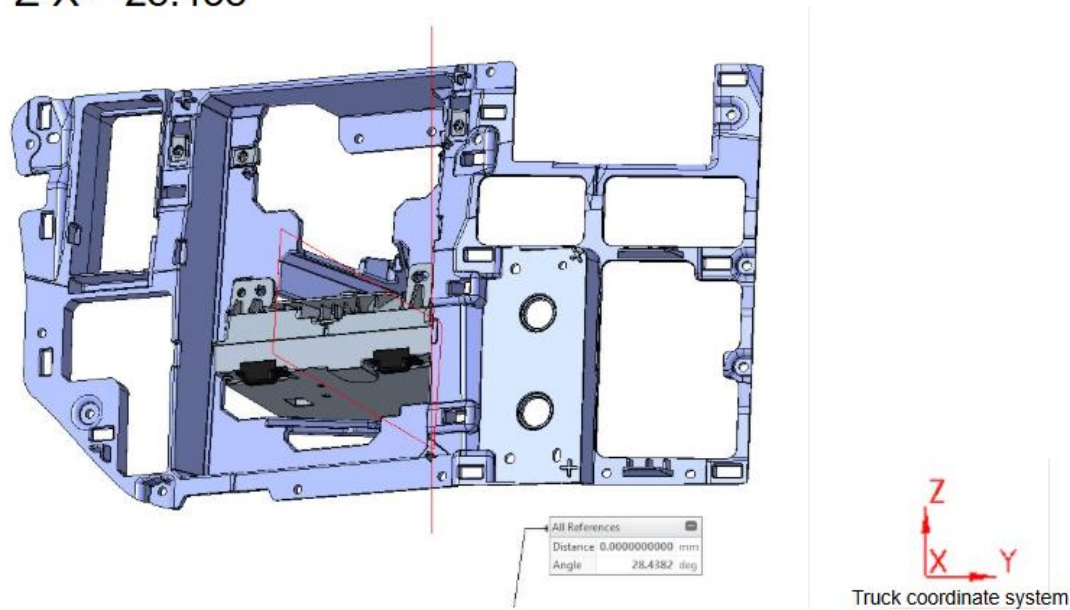


Figure 2.4 Silverbox Mounting Angles PB

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
 © Continental AG		Product Informations.doc [I]		Page 6 of 29

1.3.1.3 Mounted Displays Views

1.3.1.3.1 Peterbilt Views

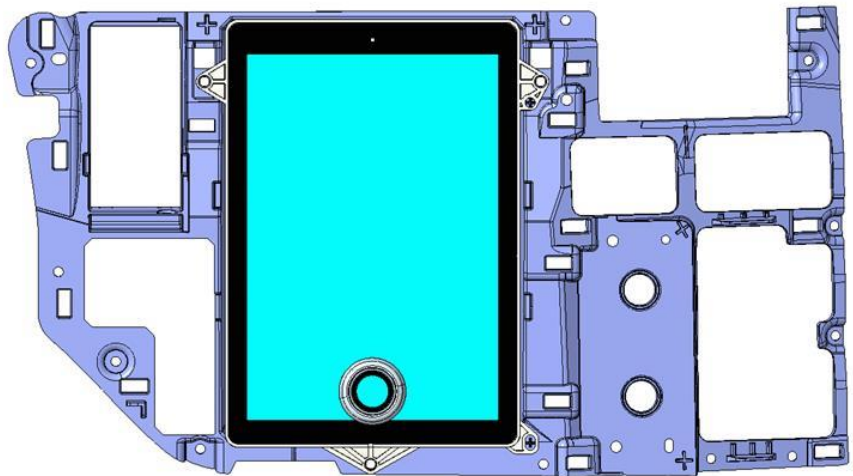


Figure 3.1 View PB Display mounted

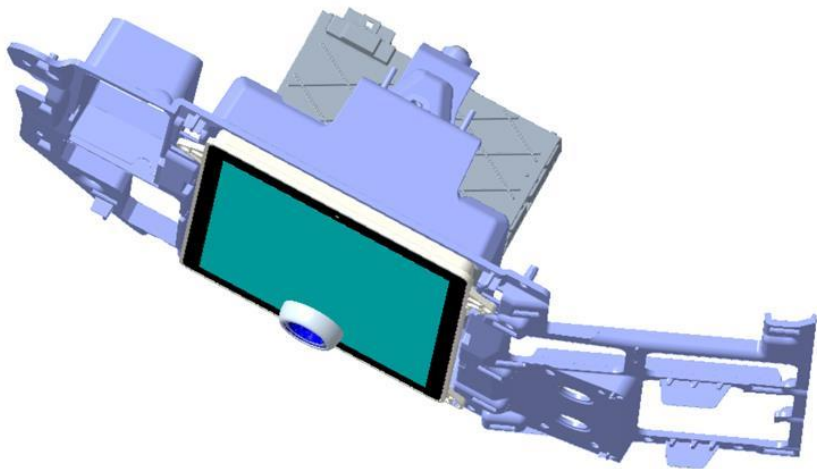


Figure 3.2 View PB Display mounted

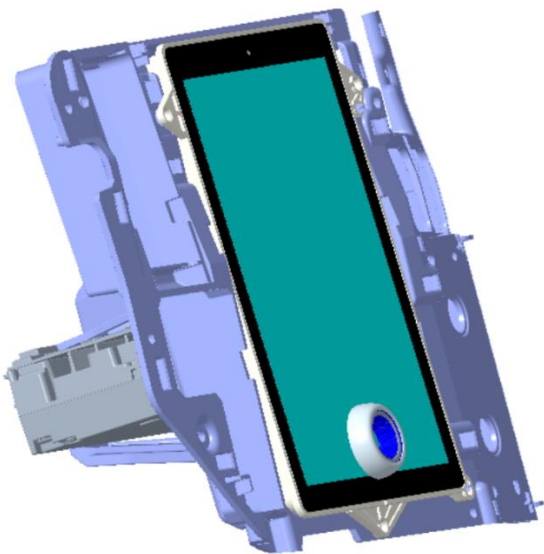


Figure 3.3 View PB Display mounted

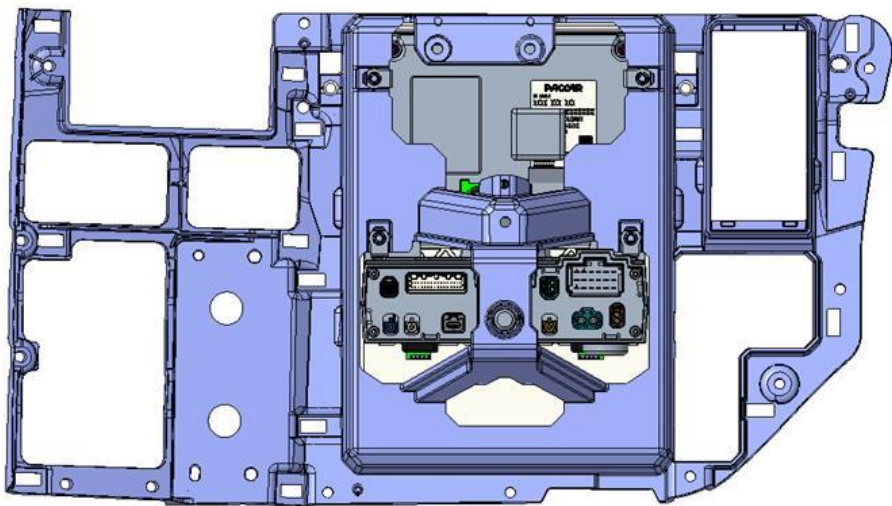


Figure 3.4 View PB Display mounted

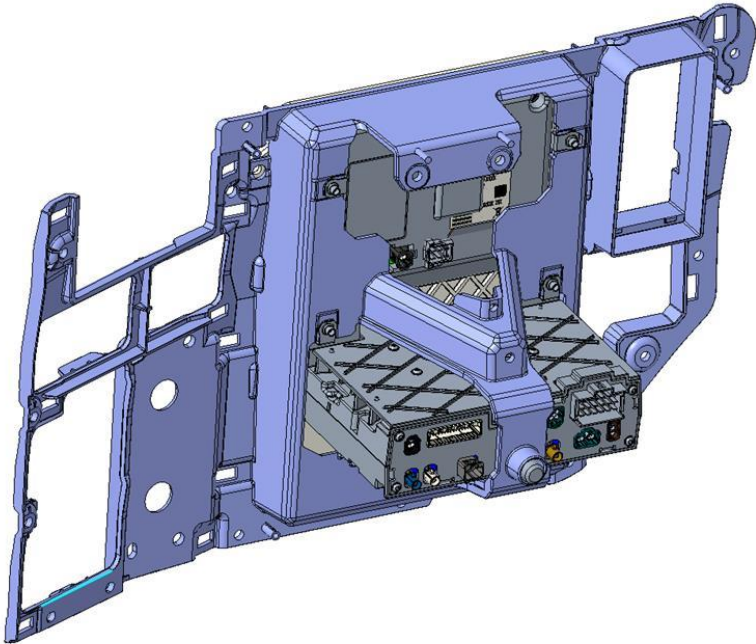


Figure 3.5 View PB Display mounted

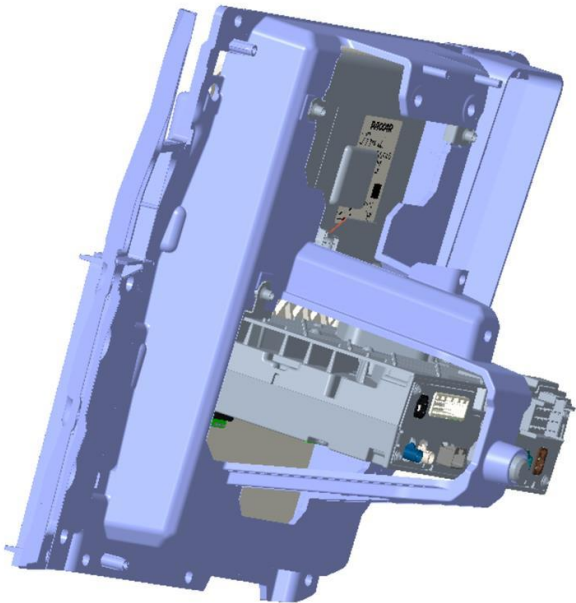


Figure 3.6 View PB Display mounted

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
 © Continental AG		Product Informations.doc [I]		Page 9 of 29

1.3.1.3.2 Kenworth Views

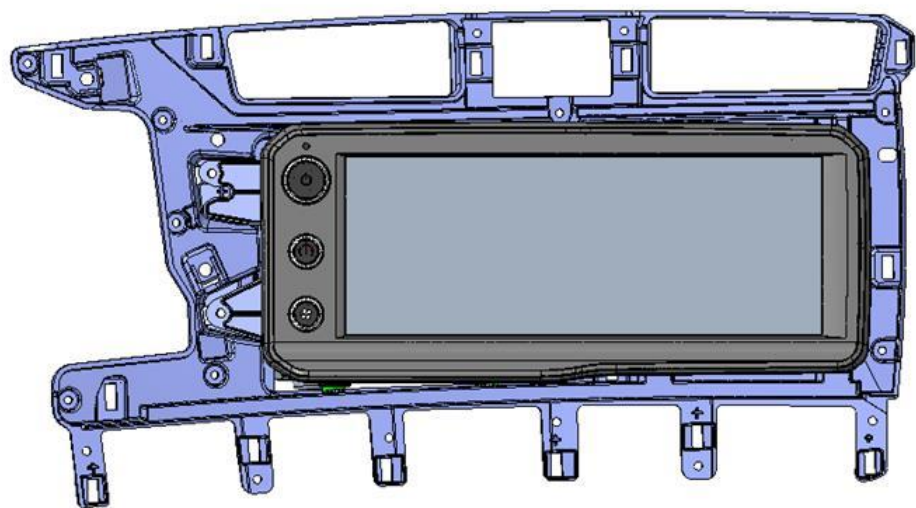


Figure 4.1 View KW Display mounted

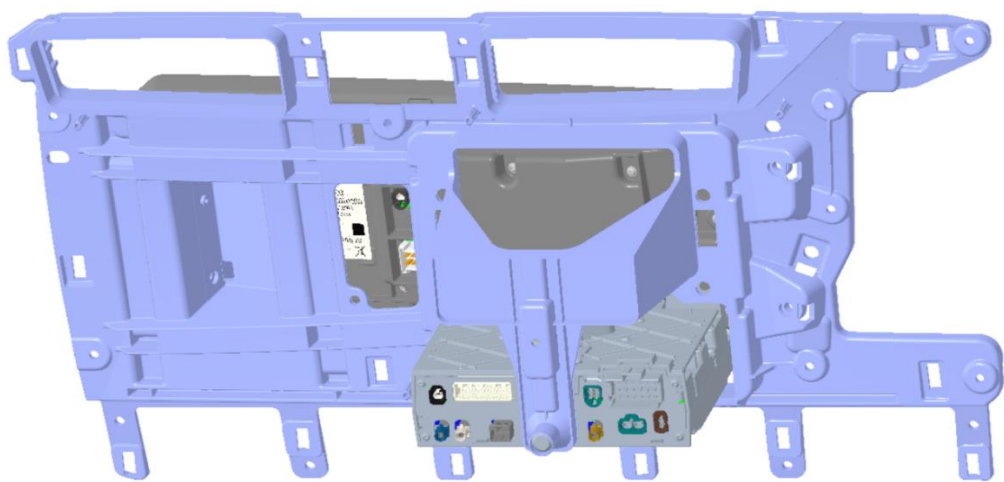


Figure 4.2 View KW Display mounted

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
 © Continental AG		Product Informations.doc [I]		Page 10 of 29

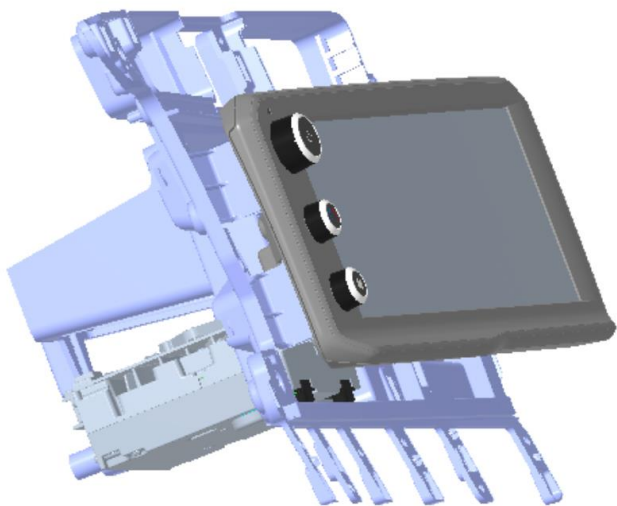


Figure 4.3 View KW Display mounted

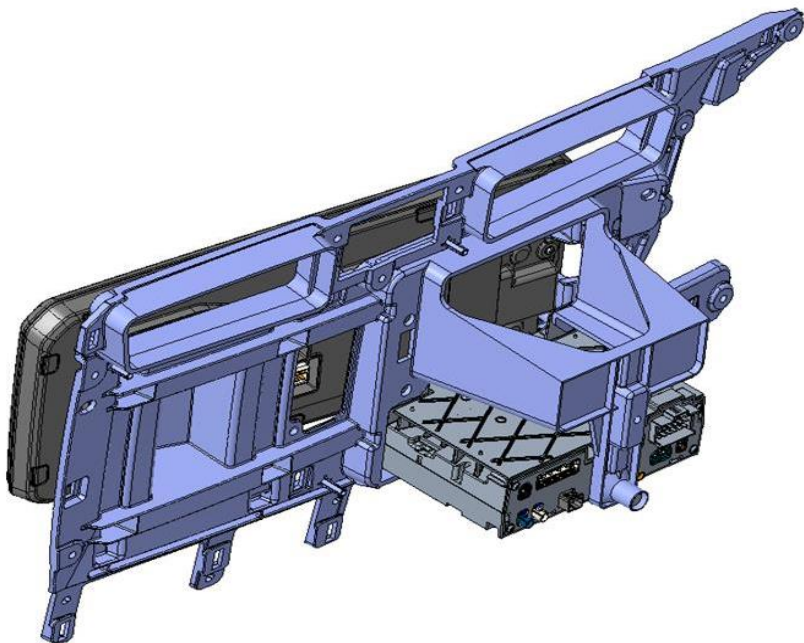


Figure 4.4 View KW Display mounted

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
 © Continental AG		Product Informations.doc [I]		Page 11 of 29

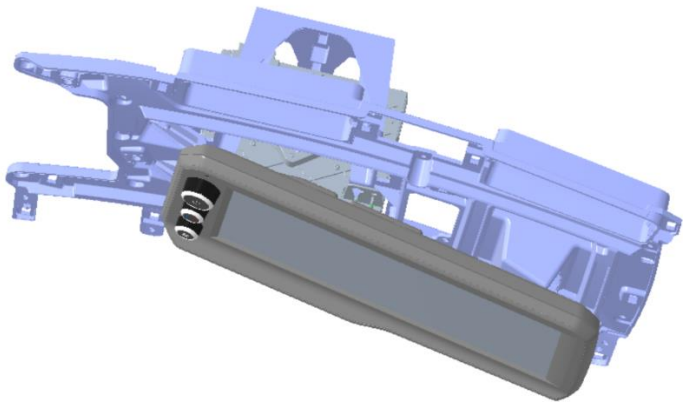


Figure 4.5 View KW Display mounted

1.3.2 Connector Mapping (Interface Overview)

The device provides multiple connectors whose mapping defines the available interfaces for integration with the vehicle system.

Initial step for mounting the device is to plug the associated harnesses according to the connectors mapping presented below:

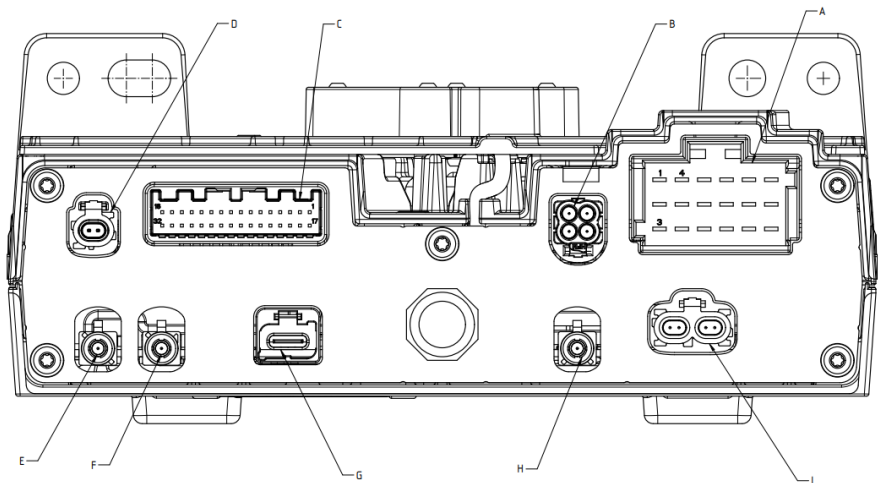


Figure 5 Silverbox Connector Mapping

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
	© Continental AG			Page 12 of 29
				Product Informations.doc [I]

SILVERBOX CONNECTORS				
ITEM	QTY	DESCRIPTION	SUPPLIER	SUPPLIER PART NUMBER
A	1	PWR CAN AUDIO	Tyco	9-966140-1
B	1	DIGITAL CAMERAS	Rosenberger	AMS2UD-40MZ5-Z
C	1	MAIN CONNECTOR	Tyco	2326784-3
D	1	ETHERNET	Rosenberger	E6S20A-40MT5-C
E	1	GNSS (ANTENNA)	Rosenberger	59S2AQ-40MT5-C_1
F	1	AM + FM (ANTENNA)	Rosenberger	59S2AQ-40MT5-B_1
G	1	USB 3.0 / USB 2.0	Tyco	2398001-1
H	1	SDARS (ANTENNA)	Rosenberger	59S2AQ-40MT5-K_1
I	1	VIDEO OUTPUTS	Rosenberger	E6S20B-40MT5-Z

Table 2 Silverbox Connectors

After the connection of the associated harnesses, the device will have to be installed according to the specific procedure (procedure developed by customer)

1.3.3 Pin-Out Details

Each connector pin is assigned to a specific function, with defined signals and electrical characteristics as detailed in the following tables:

1.3.3.1 PWR CAN AUDIO

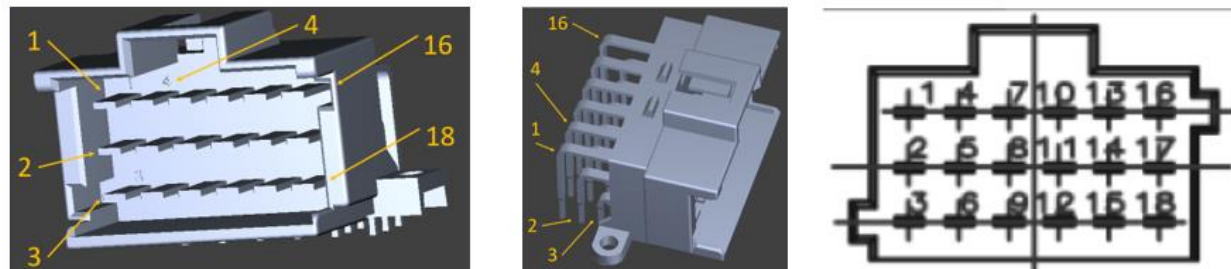


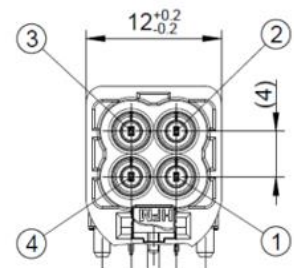
Figure 6 Power-Audio-CAN Connector Drawing

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 13 of 29

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
1	KL30	BATTERY+	Input	9V to 16V	9 A
2	KL30	BATTERY+	Input	9V to 16V	9 A
3	GND	BATTERY-	Reference / GND	0 V	-9 A
4	CAN 1_H	CAN 01 HIGH	Bidirectional		
5	CAN 2_H	CAN 02 HIGH	Bidirectional		
6	GND	BATTERY-	Reference / GND	0 V	-9 A
7	CAN 1_L	CAN 01 LOW	Bidirectional		
8	CAN 2_L	CAN 02 LOW	Bidirectional		
9	CAN 3_H	CAN 03 HIGH	Bidirectional		
10	LS_CH1_P	Audio amplifier output 1+ (FRONT LH speaker)	Output	0V to 15.5V	2.3 A
11	LS_CH1_M	Audio amplifier output 1- (FRONT LH speaker)	Output	0V to 15.5V	-2.3 A
12	CAN 3_L	CAN 03 LOW	Bidirectional		
13	LS_CH2_P	Audio amplifier output 2+ (FRONT RH speaker)	Output	0V to 15.5V	2.3 A
14	LS_CH2_M	Audio amplifier output 2- (FRONT RH speaker)	Output	0V to 15.5V	-2.3 A
15	LS_CH4_M	Audio amplifier output 4- (REAR RH speaker)	Output	0V to 15.5V	-2.3 A
16	LS_CH3_P	Audio amplifier output 3+ (REAR LH speaker)	Output	0V to 15.5V	2.3 A
17	LS_CH3_M	Audio amplifier output 3- (REAR LH speaker)	Output	0V to 15.5V	-2.3 A
18	LS_CH4_P	Audio amplifier output 4+ (REAR RH speaker)	Output	0V to 15.5V	2.3 A

Table 3 Power Connector Signal Description

1.3.3.2 Digital Cameras



Connector color = Water blue

Figure 7 Digital Camera Input Connector

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 14 of 29

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
1	DCAM_DATA_01	Digital camera input 1 FRONT CAMERA	Input		
2	DCAM_DATA_02	Digital camera input 2 LEFT CAMERA	Input		
3	DCAM_DATA_03	Digital camera input 3 RIGHT CAMERA	Input		
4	DCAM_DATA_04	Digital camera input 4 REAR CAMERA	Input		
M1 to M5	GND	GND Shielding	Reference / GND	0V	

Table 5 Digital Camera Input Connector Signal Description

1.3.3.3 Main Connector

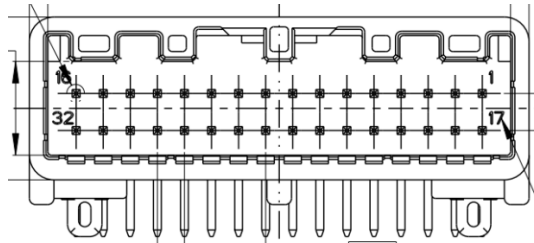


Figure 8 Main connector pin count.

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
1	CVBS_4_N	Analog camera input 4- (REAR CAMERA)	Input		
2	CVBS_4_P	Analog camera input 4+ (REAR CAMERA)	Input		
3	CVBS_3_N	Analog camera input 3- (RIGHT CAMERA)	Input		
4	CVBS_3_P	Analog camera input 3+ (RIGHT CAMERA)	Input		
5	CVBS_2_N	Analog camera input 2- (LEFT CAMERA)	Input		
6	CVBS_2_P	Analog camera input 2+ (LEFT CAMERA)	Input		
7	CVBS_1_N	Analog camera input 1- (FRONT CAMERA)	Input		

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 15 of 29

8	CVBS_1_P	Analog camera input 1+ (FRONT CAMERA)	Input		
9	Spare / Not connected.				
10	ANT_AMFM_PWR_OUT	AM/FM Antenna power output (Not available in B2 sample. Planned for C1 sample, pending ECR #20 approval).	Output	10V	150 mA
11	Spare / Not connected.				
12	Spare / Not connected.				
13	Spare / Not connected.				
14	Not connected.	A2B Signal Integrity			
15	Not connected.	A2B Signal Integrity			
16	Not connected.	A2B Signal Integrity			
17	KL15	Ignition Signal	Input	9V to 16V	1 mA
18	EXT_AMPLIFIER_WAKE_UP	External amplifier wake-up signal	Output	8.5V to 15.5V	20 mA
19	UART7_RT2DEBUG_CONN	UART debug AC (For development only)	Output		
20	UART7_DEBUG2RT_CONN	UART debug AC (For development only)	Input		
21	SOC_EDL_MCON2SOC	Programming mode for the SiP, for series production is not accessible.	Input	9V to 16V	2 mA
22	UART0_DEBUG2SOC	UART debug GC (For development only)	Input		
23	UART0_SOC2DEBUG	UART debug GC (For development only)	Output		
24	MIC1_P_IN	Microphone 1+ (Hosiden Q28-6030)	Input		
25	MIC1_GND	Microphone 1 GND (Hosiden Q28-6030)	Reference / GND		
26	MIC1_N_IN	Microphone 1- (Hosiden Q28-6030)	Input		
27	MIC1_BIAS	Microphone 1 BIAS (Hosiden Q28-6030)	Output		
28	MIC2_N_IN	Microphone 2- (BT ME60)	Input		
29	MIC2_P_IN	Microphone 2+ (BT ME60)	Input		
30	Not connected.	A2B Signal Integrity			
31	A2B_BP	A2B Digital Audio+	Bidirectional		300 mA
32	A2B_BN	A2B Digital Audio-	Bidirectional		

Table 6 Main Connector Signal Description

Confidential		Internal	Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com			02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG			Page 16 of 29
Product Informations.doc [I]					

1.3.3.4 Ethernet



Figure 9 Ethernet Connector Drawing

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
1	ETH_PHY_M	Ethernet PHY-	Bidirectional		
2	ETH_PHY_P	Ethernet PHY+	Bidirectional		
M1 to M4	GND	GND Shielding	Reference / GND	0V	

Table 7 Ethernet Connector Signal Description

1.3.3.5 GNSS (Antenna)



Figure 10 GNSS Antenna Connector Drawing

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
1	GNSS_RF_IN	GNSS antenna input	Input		
M1 to M4	GND	GND Shielding	Reference / GND	0V	

Table 1 GNSS Antenna Connector Signal Description

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 17 of 29

1.3.3.6 AM + FM (Antenna)



Connector color = White

Figure 11 AM/FM Antenna Connector Drawing

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
1	AM_FM_IN	AM/FM antenna input	Input		
M1 to M4	GND	GND Shielding	Reference / GND	0V	

Table 2 AM/FM Antenna Connector Signal Description

1.3.3.7 USB 3.0 / USB 2.0

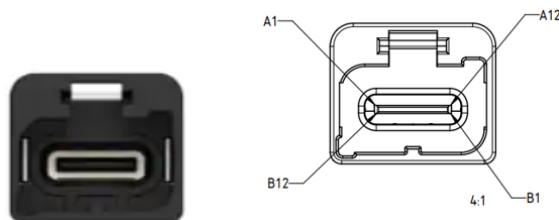


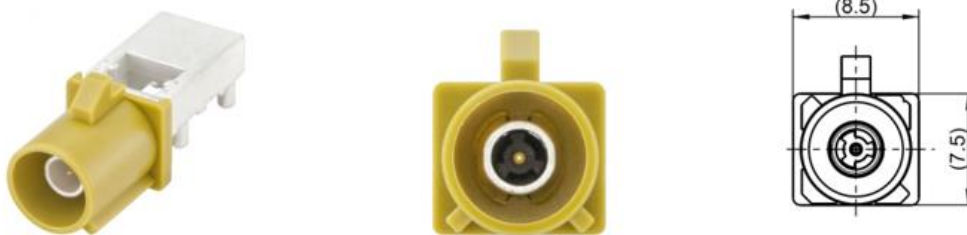
Figure 12 USB Type C for USB 2.0 and 3.0 Connector Drawing

Confidential	Internal	Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com		02.09.2025	SMY GDL SY	
Released By saul.cardenas@aumovio.com			SMY GDL SY	
	© Continental AG	Product Informations.doc [I]		Page 18 of 29

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
A1	USB_3_0_VBUS	USB 3.0 +5V VBUS power	Output	5V	
A2	USB3_0_TX_P_SOC2RD	USB 3.0 SS TX+	Output		
A3	USB3_0_TX_N_SOC2RD	USB 3.0 SS TX-	Output		
A4	USB_3_0_VBUS	USB 3.0 +5V VBUS power	Output	5V	
A5	USBP2_DM_SOC2CON2_HV	USB 3.0 HS D-	Bidirectional		
A6	USBP2_DP_SOC2CON2_HV	USB 3.0 HS D+	Bidirectional		
A7	USB_3_0_VBUS	USB 3.0 +5V VBUS power	Output	5V	
A8	USB_2_0_VBUS	USB 2.0 +5V VBUS power	Output	5V	
A9	USB_2_0_VBUS	USB 2.0 +5V VBUS power	Output	5V	
A10	USBP1_DM_SOC2CON1_HV	USB 2.0 D-	Bidirectional		
A11	USBP1_DP_SOC2CON1_HV	USB 2.0 D+	Bidirectional		
A12	USB_2_0_VBUS	USB 2.0 +5V VBUS power	Output	5V	
B1	GND	USB 2.0 GND	Reference / GND	0V	
B2	GND	USB 2.0 GND	Reference / GND	0V	
B3	GND	USB 2.0 GND	Reference / GND	0V	
B4	GND	USB 2.0 GND	Reference / GND	0V	
B5	GND	USB 3.0 GND	Reference / GND	0V	
B6	GND	USB 3.0 GND	Reference / GND	0V	
B7	GND	USB 3.0 GND	Reference / GND	0V	
B8	GND	USB 3.0 GND	Reference / GND	0V	
B9	GND	USB 3.0 GND	Reference / GND	0V	
B10	USB3_0_RX_N_RD2SOC	USB 3.0 SS RX-	Input		
B11	USB3_0_RX_P_RD2SOC	USB 3.0 SS RX+	Input		
B12	USB_3_0_VBUS	USB 3.0 +5V VBUS power	Output	5V	

Table 10 USB 2.0 and 3.0 Connector Signal Description

1.3.3.8 SDARS (Antenna)



Connector color = Curry

Figure 13 SDARS Antenna Connector Drawing

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 19 of 29

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
1	SXM_ANT	Xirus XM antenna input	Input		
M1 to M4	GND	GND Shielding	Reference / GND	0V	

Table 11 SDARS Antenna Connector Signal Description

1.3.3.9 Video Outputs



Figure 14 Video Output Connector Drawing

Connector pin #	Signal name	Description	Input / Output	Voltage	Max. Current
1-1	SIOAP A-panel display	Video output 1+ GMSL2 SIOAP for Instrument Cluster display (SPARE)	Output		
1-2	SIOAN A-panel display	Video output 1- GMSL2 SIOAN for Instrument Cluster display (SPARE)	Output		
2-1	SIOBP B-panel display	Video output 2+ GMSL2 SIOAP for Center Stack display	Bidirectional		
2-2	SIOBN B-panel display	Video output 2- GMSL2 SIOAN for Center Stack display	Bidirectional		
M1 to M7	GND	GND Shielding	Reference / GND	0V	

Table 12 Video Output Connector Signal Description

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ocha.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 20 of 29

1.4 Interfaces

1.4.1 Interfaces with other ECUs/devices in the vehicle

Interfaces with other ECUs/modules available in the vehicle:

- Power supply lines (KL 30 and GND)
- KL 15 input indicating vehicle ignition signal
- Ethernet communication interface (100Base-T1)
- 2 CAN nodes with frequency up to 500 kBaud (CAN1 – interface to vehicle CAN network, CAN2 – interface to display)
- USB 2.0 and USB 3.0 communication interface for phone charge and Android Auto and Apple CarPlay
- 1 Generic digital output signals, HSD (Remote Wake Up)
- 4 Digital camera inputs
- 4 Analog camera inputs
- 2 Microphone inputs
- 2 Video output (Serializer)
- AM/FM Tuner
- 4 Audio output

1.4.2 RF communication interfaces

RF communication interfaces supported by PCnP Silverbox are:

- WIFI communication; PCnP Silverbox system supports 2.4GHz and 5GHz WiFi technology for interfacing with customer specific devices and tools.
- BT communication; PCnP Silverbox system supports BT classic technology for interfacing with customer specific devices and tools.
- GNSS signal acquisition; PCnP Silverbox system uses GNSS tracking system in order to determine vehicle precise location, vehicle speed, and also to perform vehicle location tracking. GNSS tracker is also the main source of PCnP Silverbox system time.

This RF communication protocols are supported on all variants.

Following antenna mapping is used for RF communication:

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Product Informations.doc [I] Page 21 of 29

Block Diagram

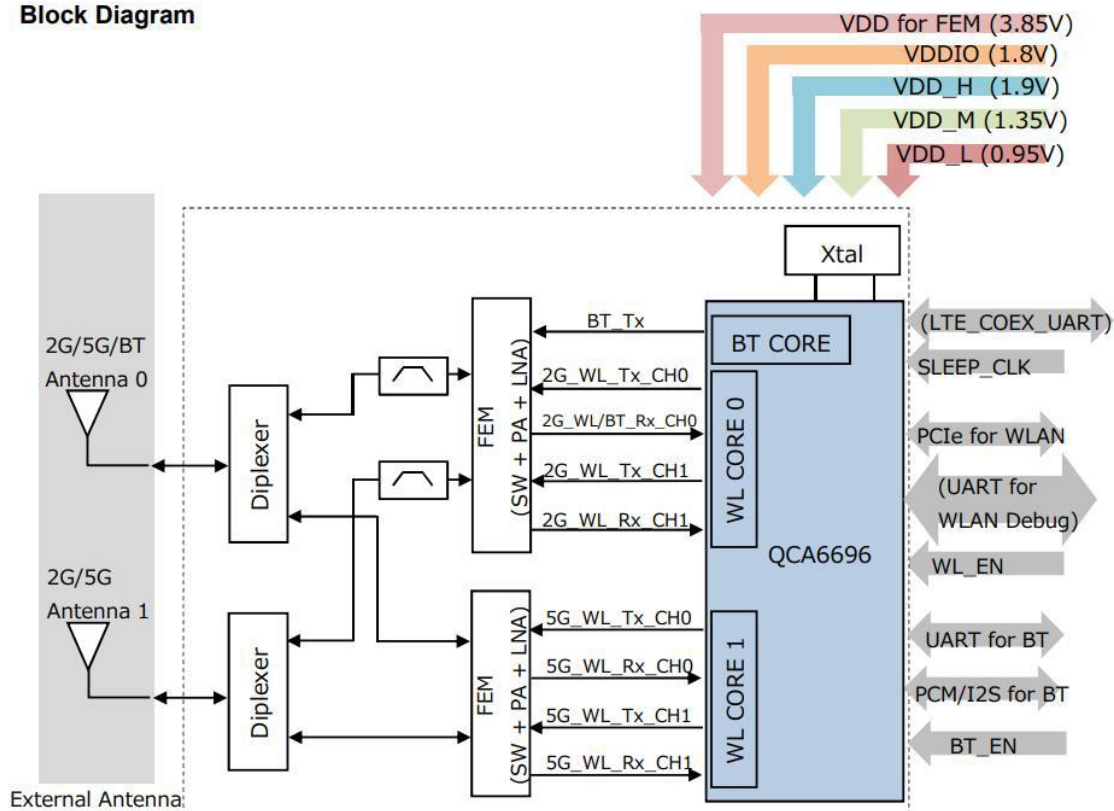


Figure 15 Antenna Mapping Block Diagram

Antenna functionality	Location	Description
AM/FM	External	The antenna has an in-built amplifier to increase receive signal sensitivity; not in project scope
SDARS	External	SiriusXM; not in project scope
WiFi/BT	Internal	Internal WiFi/BT antenna shared between the 2 RF technologies
GNSS	External	GNSS reception antenna; not in project scope

Table 13 Antenna Description

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.choa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 22 of 29

1.5 Expected behaviour

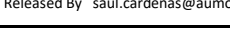
Main functionalities provided by Silverbox device:

- GNSS positioning (starts automatically after boot up phase)
- Communication over WIFI (triggered by customer application or test application)
- Communication over BT (triggered by customer application or test application)
- Communication via CAN based on database received from the customer.
- TCP communication via Ethernet.

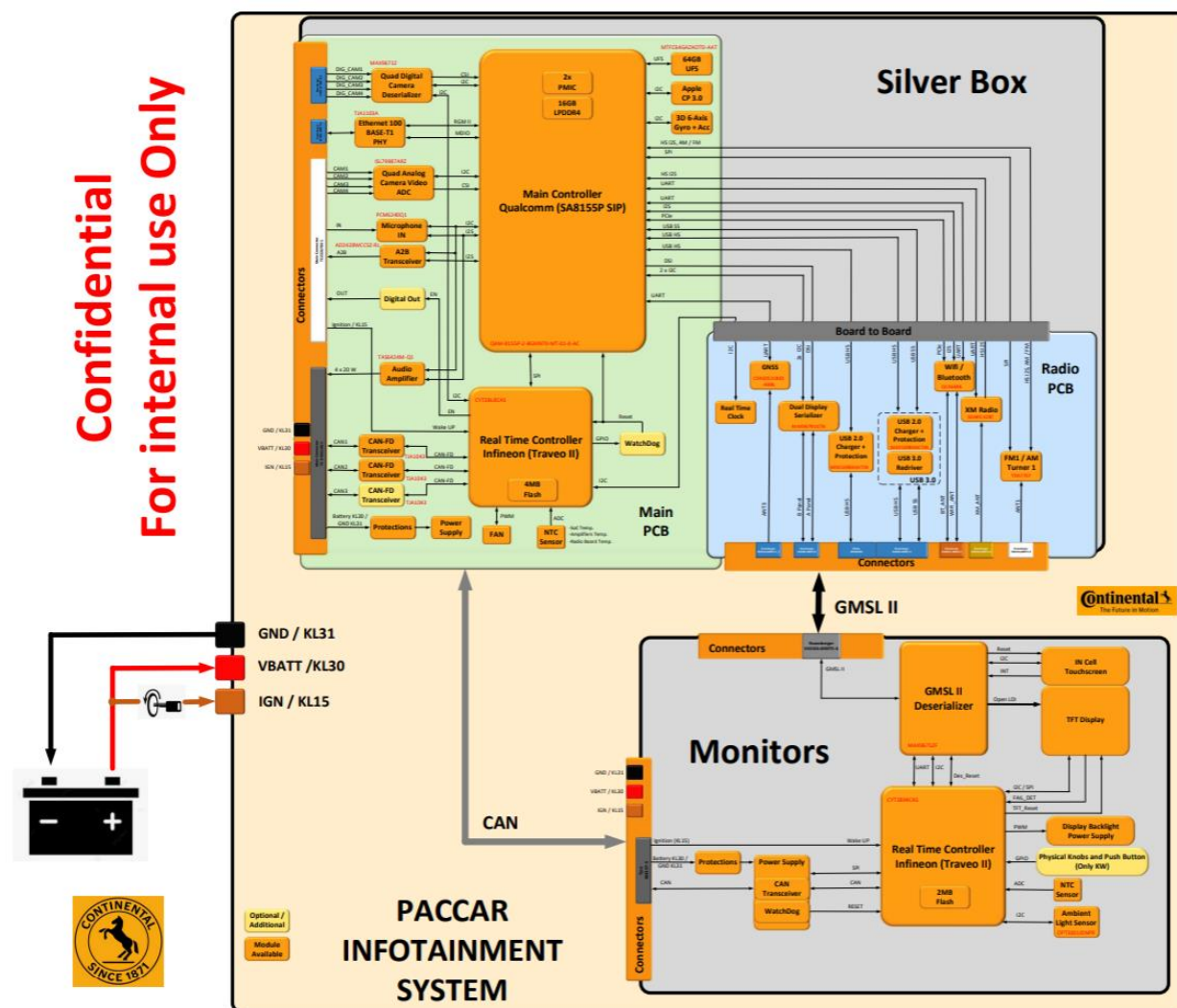
1.6 Restrictions

Assembly or disassembly of the Silverbox while operating voltage is connected is not allowed.

Assembly or disassembly of connectors while operating voltage is connected is not allowed.

Confidential		Internal	Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com			02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG			Page 23 of 29
Product Informations.doc [I]					

1.7 Block diagram PCnP



Confidential Internal	Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com	02.09.2025	SMY GDL SY SMY GDL SY	
	© Continental AG		Page 24 of 29 Product Informations.doc [I]

1.8 Radio Frequency Configuration

1.8.1 NA variants

WLAN standards and frequencies	n, ac, ax (SISO)		
	Freq. Range	Bands	DFS
	5170 - 5250 MHz	U-NII-1	without DFS
	5735 - 5815 MHz	U-NII-3	without DFS
Bluetooth frequencies	2400-2480 MHz		

1.9 Supply Voltage

Nominal voltage:	13.5 V
Functional range:	9 V to 16 V
Supply current:	Silverbox Quiescent current in Sleep mode of max. 5mA ($9V \leq V_{Batt} \leq 16V$). The Infotainment system maximum current shall be less than 10A.

Confidential	Internal	Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com		02.09.2025	SMY GDL SY	
Released By saul.cardenas@aumovio.com			SMY GDL SY	
	© Continental AG	Product Informations.doc [I]		Page 25 of 29

1.10 Wired Interfaces configuration

Interface	Characteristics
Ethernet	- complies with IEEE P802.3bw standard; - complies with 100BASE-T1 standard; Ethernet connector: - Model Rosenberger E6S20A-40MT5-C - Impedance - 50 Ohm;
CAN	Silverbox supports 2 CAN communication nodes - Complies with ISO 11898 physical layer; - default baud rate on all CAN channels 500 kBaud
USB	USB used for : -Connect mirror screen in application level and as loading port. -Flashing in production. USB connector: - Model Tyco 2398001-1; - Female type; - Compatible with USB3.0/ USB 2.0; - Shielded, full shield; - Maximum voltage 30V; - No grounding to the panel; - No standard pinout (Customized)
TRM15	- 1 x Dig In signal - Electrical threshold for LOW level $\leq 9V$; - Electrical threshold for HIGH level $\geq 16V$;
Digital Outputs	- 1 x Dig output signals - Electrical level for inactive level $\leq 2V$; - Electrical threshold for active level $\geq 6V$;

1.11 Manufacturer

Continental Automotive Technologies GmbH

Heinrich-Hertz-Straße 45

78052 Villingen-Schwenningen

Germany

Confidential	Internal	Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com		02.09.2025	SMY GDL SY	
Released By saul.cardenas@aumovio.com			SMY GDL SY	
	© Continental AG	Product Informations.doc [I]		Page 26 of 29

1.12 HS Code

HS Code: 8517.62.0090

1.13 Environmental conditions

Operating temperature range	-40°C to +70°C
Storage temperature range	-40°C to + 85°C
System of protection	IP52 in mounting position with connectors.
Relative humidity	≥ 90%

1.14 User Manual Statements and Labels

Brazil (Online)

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar Interferência em sistemas devidamente autorizados. Para maiores informações, consulte o site da ANATEL www.gov.br/anatel

USA/Canada (Online)

Model

AAA26838

FCC ID: 2AJW5PCNPSLV

IC: 21979-PCNPSLV

This device complies with Part 15 of the FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

Confidential	Internal	Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com		02.09.2025	SMY GDL SY	
Released By saul.cardenas@aumovio.com			SMY GDL SY	
	© Continental AG			Page 27 of 29

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with FCC/ISED radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the ISED radio frequency (RF) Exposure rules. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The antenna should be installed and operated with minimum distance of 20 cm between the radiator and your body.

Le présent appareil est conforme à l'exposition aux radiations FCC / ISED définies pour un environnement non contrôlé et répond aux directives d'exposition de la fréquence de la FCC radiofréquence (RF) et RSS-102 de la fréquence radio (RF) ISED règles d'exposition. L'émetteur ne doit pas être colocalisé ni fonctionner conjointement avec à autre antenne ou autre émetteur. L'antenne doit être installée de façon à garder une distance minimale de 20 centimètres entre la source de rayonnements et votre corps.

Continental Automotive Technologies GmbH has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

Continental Automotive Technologies GmbH *n'approuve aucune modification apportée à l'appareil par l'utilisateur, quelle qu'en soit la nature. Tout changement ou modification peuvent annuler le droit d'utilisation de l'appareil par l'utilisateur.*

Mexico (Online)

Para su uso en México, la operación de este equipo está sujeta a las siguientes dos condiciones:

(1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Instrucciones para localizar el número IMEI

El el número IMEI se encuentra en la etiqueta del dispositivo.



Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
		© Continental AG		Page 28 of 29



Nicaragua

El Salvador

Ecuador

Chile

Colombia

Costa Rica

Panama

Peru

Confidential Internal		Date	Department	Signature
Designed By oscar.eduardo.ochoa.inzunza@aumovio.com Released By saul.cardenas@aumovio.com		02.09.2025	SMY GDL SY SMY GDL SY	
The Continental logo, featuring the word "Continental" in a bold, sans-serif font, followed by a stylized horse head icon.		© Continental AG		Product Informations.doc [I] Page 29 of 29