

ADA-UART-1

Hardware Description

Rev3 / 03.07.2014

SONr.: 11109

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Revision: **3 / 03.07.2014**

Rev	Date/Signature	Changes
1	31.05.2011/Ko	First Revision
2	31.05.2012/Mt	Changed the UART assignment of Verno-1
3	03.07.2014/Ko	Added Cadun and Tarion, Added Link to UART Translation Table

1 Introduction

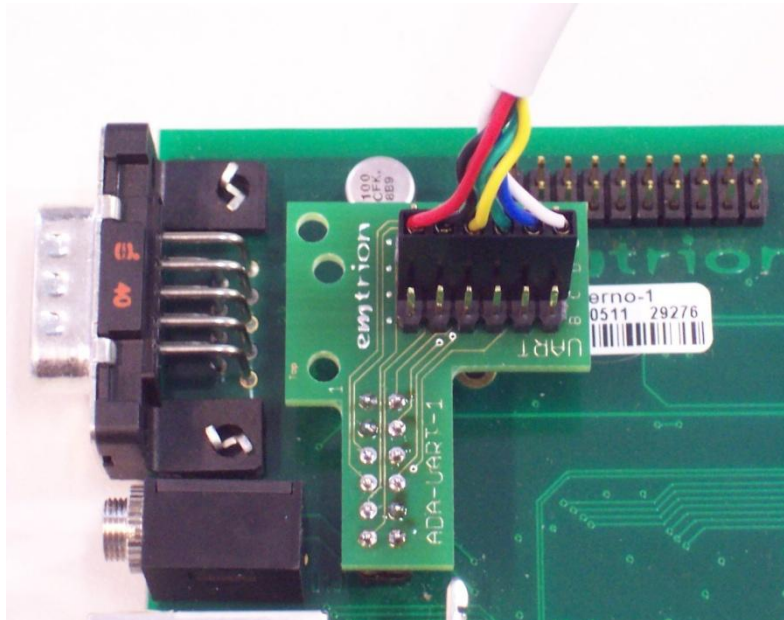
The ADA-UART-1 is an adapter for HiCO.DIMM-Base, HiCO.DIMM-EcoBase, DIMM-Eco-Base Verno, DIMM-Eco-Base Cadun, DIMM-Eco-Base Tarion and DIMM-Base Lothron for simply plugging a HiCO.ADA232 adapter.

This manual describes how to you use the adapter and some electrical characteristics.

2 Description

2.1 How to Use

You have to plug the HiCO.ADA232 on the ADA-UART-1 like in the picture so that the dot on the ADA-UART-1 is near the red cable.



You could use maximum 4 of the HiCO.ADA232. The following table shows which UARTS can be used on the different bases

Base	UART B	UART C	UART D	UART E
HiCO.DIMM-EcoBase	UART C	UART B	UART D	UART E
HiCO.DIMM-Base	*	UART C	UART D	UART E
DIMM-Eco-Base Verno R1	UART D	UART E	UART C	UART B
DIMM-Eco-Base Verno**	UART B	UART C	UART D	UART E
DIMM-Eco-Base Cadun	UART B	UART C	UART D	UART E
DIMM-Eco-Base Tarion	UART B	UART C	UART D	UART E
DIMM-Base-Lothron	*	UART C	UART D	UART E

*Available at D-Sub9 connector with RS232 level.

**all Verno revisions except R1

For more details how the signals are routed from the CPU to the UART Connector take a look on [UART Translation Table](#)

2.1.1 With HiCO.DIMM-EcoBase

For plugging the ADA-UART-1 to a HiCO.DIMM-EcoBase you have to take the connector JP1 on ADA-UART-1 side and plug it on J12 on the HiCO.DIMM-EcoBase.

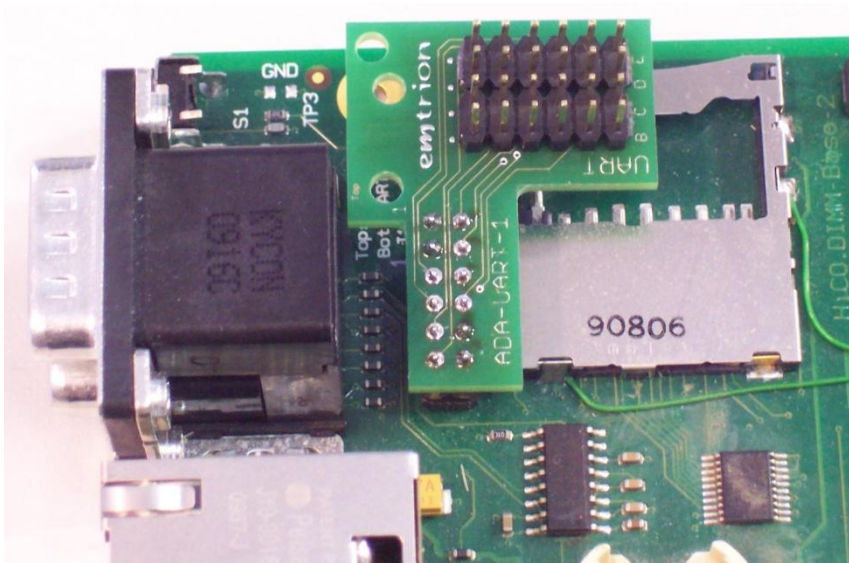


The HiCO.DIMM-EcoBase has the following pin assignments

Description	Pin	Pin	Description
3V3	1	2	SCIF0_CTS
GND	3	4	SCIF0_RTS
SCIF2_TXD	5	6	SCIF0_RXD
SCIF2_RXD	7	8	SCIF0_TXD
SCIF2_RTS	9	10	GND
SCIF2_CTS	11	12	3V3

2.1.2 With HiCO.DIMM-Base

For plugging the ADA-UART-1 to a HiCO.DIMM-Base take the connector JP1 on ADA-UART-1 side and plug it on J15 on the HiCO.DIMM-EcoBase.



The HiCO.DIMM-Base has the following pin assignments

Description	Pin	Pin	Description
3V3	1	2	NC
GND	3	4	NC
UART_E_TXD_BUF	5	6	UART_C_RXD_BUF
UART_E_RXD_BUF	7	8	UART_C_TXD_BUF
UART_D_RXD_BUF	9	10	GND
UART_D_RXD_BUF	11	12	3V3

2.1.3 With DIMM-Eco-Base Verno

For plugging the ADA-UART-1 to a DIMM-Eco-Base Verno take the connector JP1 on ADA-UART-1 side and plug it on J11 on the DIMM-Eco-Base Verno.



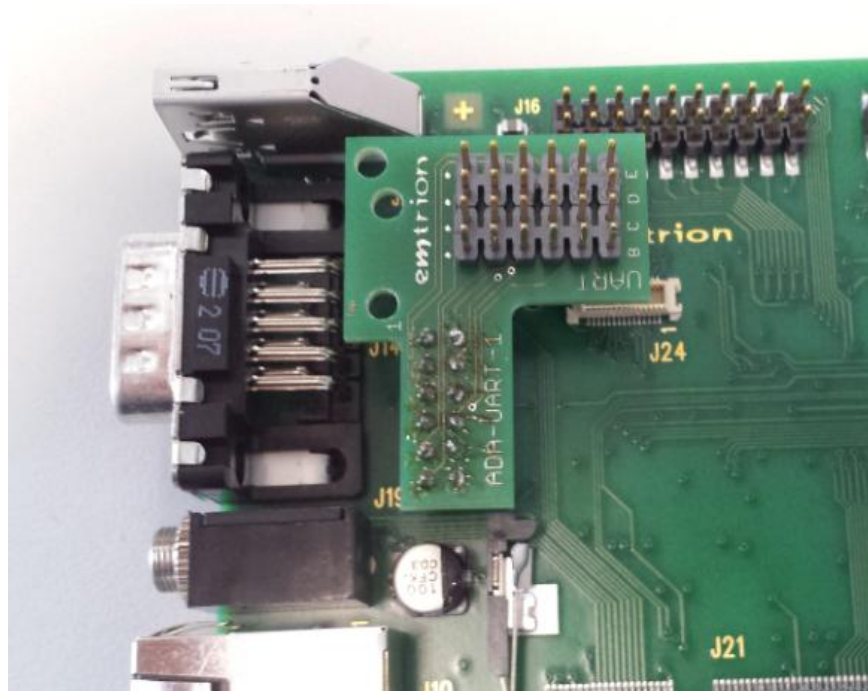
The DIMM-Eco-Base Verno has the following pin assignments

Description	Pin	Pin	Description
3V3	1	2	UART_B_RXD
GND	3	4	UART_B_TXD
UART_E_TXD	5	6	UART_C_RXD
UART_E_RXD	7	8	UART_C_TXD
UART_D_RXD	9	10	GND
UART_D_RXD	11	12	3V3

Note: On DIMM-Eco-Base Verno R1 boards UART B and UART C are swapped

2.1.4 With DIMM-Eco-Base Cadun

For plugging the ADA-UART-1 to a DIMM-Eco-Base Cadun take the connector JP1 on ADA-UART-1 side and plug it on J11 on the DIMM-Eco-Base Cadun.

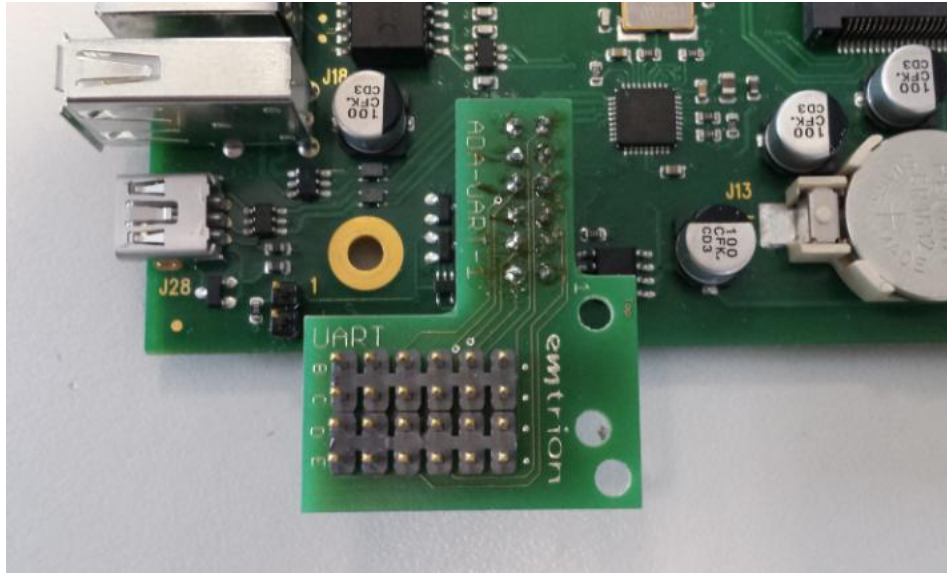


The DIMM-Eco-Base Cadun has the following pin assignments

Description	Pin	Pin	Description
3V3	1	2	UART_B_RXD
GND	3	4	UART_B_TXD
UART_E_TXD	5	6	UART_C_RXD
UART_E_RXD	7	8	UART_C_TXD
UART_D_RXD	9	10	GND
UART_D_RXD	11	12	3V3

2.1.5 With DIMM-Eco-Base Tarion

For plugging the ADA-UART-1 to a DIMM-Eco-Base Tarion take the connector JP1 on ADA-UART-1 side and plug it on J11 on the DIMM-Eco-Base Tarion.

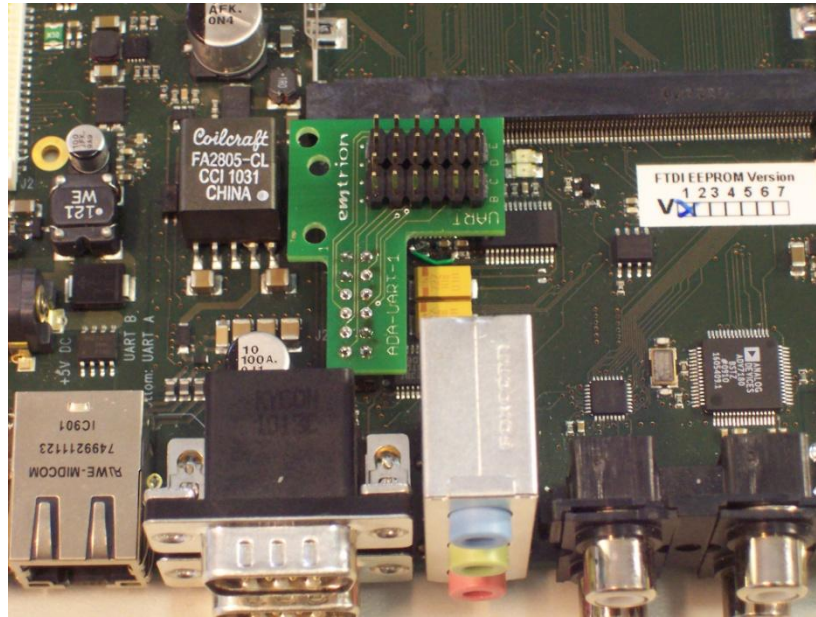


The DIMM-Eco-Base Tarion has the following pin assignments

Description	Pin	Pin	Description
3V3	1	2	UART_B_RXD
GND	3	4	UART_B_TXD
UART_E_TXD	5	6	UART_C_RXD
UART_E_RXD	7	8	UART_C_TXD
UART_D_RXD	9	10	GND
UART_D_RXD	11	12	3V3

2.1.6 With DIMM-Base Lothron

For plugging the ADA-UART-1 to a DIMM-Base Lothron take the connector JP1 on ADA-UART-1 side and plug it on J21 on the DIMM-Base Lothron.



The DIMM-Base Lothron has the following pin assignments

Description	Pin	Pin	Description
3V3	1	2	NC
GND	3	4	NC
UART_E_TXD_BUF	5	6	UART_C_RXD_BUF
UART_E_RXD_BUF	7	8	UART_C_TXD_BUF
UART_D_RXD_BUF	9	10	GND
UART_D_RXD_BUF	11	12	3V3

2.2 Pin Assignment on ADA-UART-1

2.2.1 JP1

The following table shows the pin assignment of JP1.

Description	Pin	Pin	Description
+3V3	1	2	UART_B_RXD
GND	3	4	UART_B_TXD
UART_E_TXD	5	6	UART_C_RXD
UART_E_RXD	7	8	UART_C_TXD
UART_D_TXD	9	10	GND
UART_D_RXD	11	12	+3V3

2.2.2 JP5

The following table shows the pin assignment of JP5.

Description	Pin
+3V3	1
GND	2
UART_B_TXD	3
UART_B_RXD	4
NC	5
NC	6

2.2.3 JP2

The following table shows the pin assignment of JP5.

Description	Pin
+3V3	1
GND	2
UART_C_TXD	3
UART_C_RXD	4
NC	5
NC	6

2.2.4 JP3

The following table shows the pin assignment of JP5.

Description	Pin
+3V3	1
GND	2
UART_D_TXD	3
UART_D_RXD	4
NC	5
NC	6

2.2.5 JP4

The following table shows the pin assignment of JP5.

Description	Pin
+3V3	1
GND	2
UART_E_TXD	3
UART_E_RXD	4
NC	5
NC	6