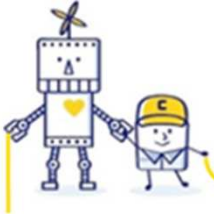


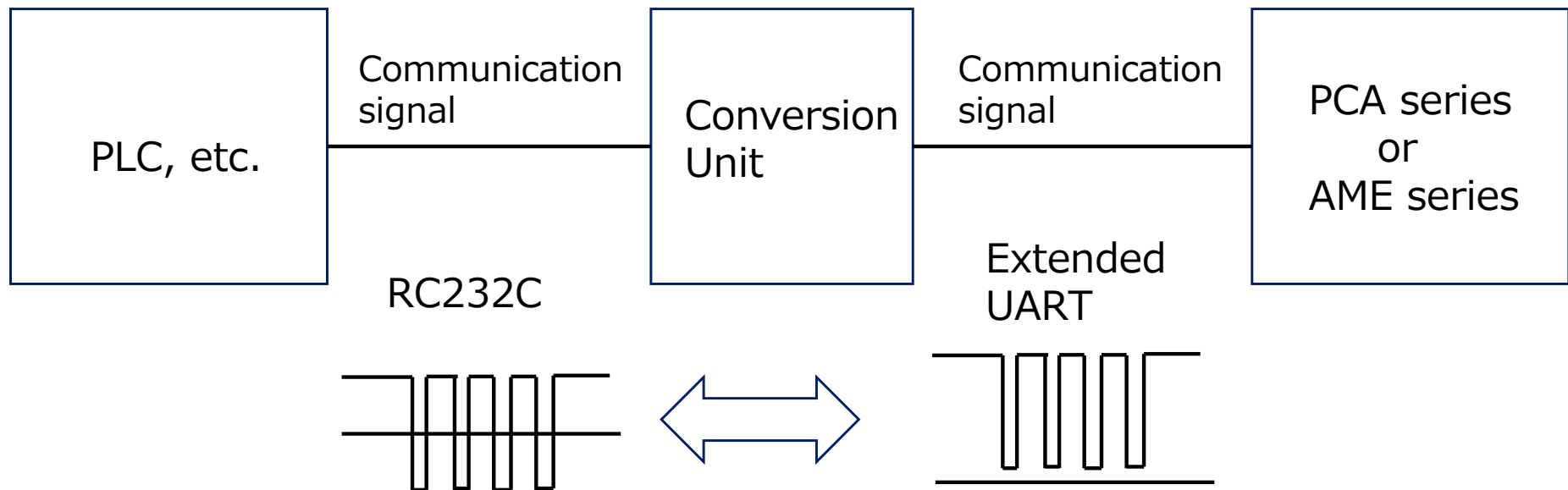
Extended UART Signal – RS232 Signal Conversion Unit Example

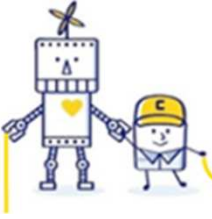


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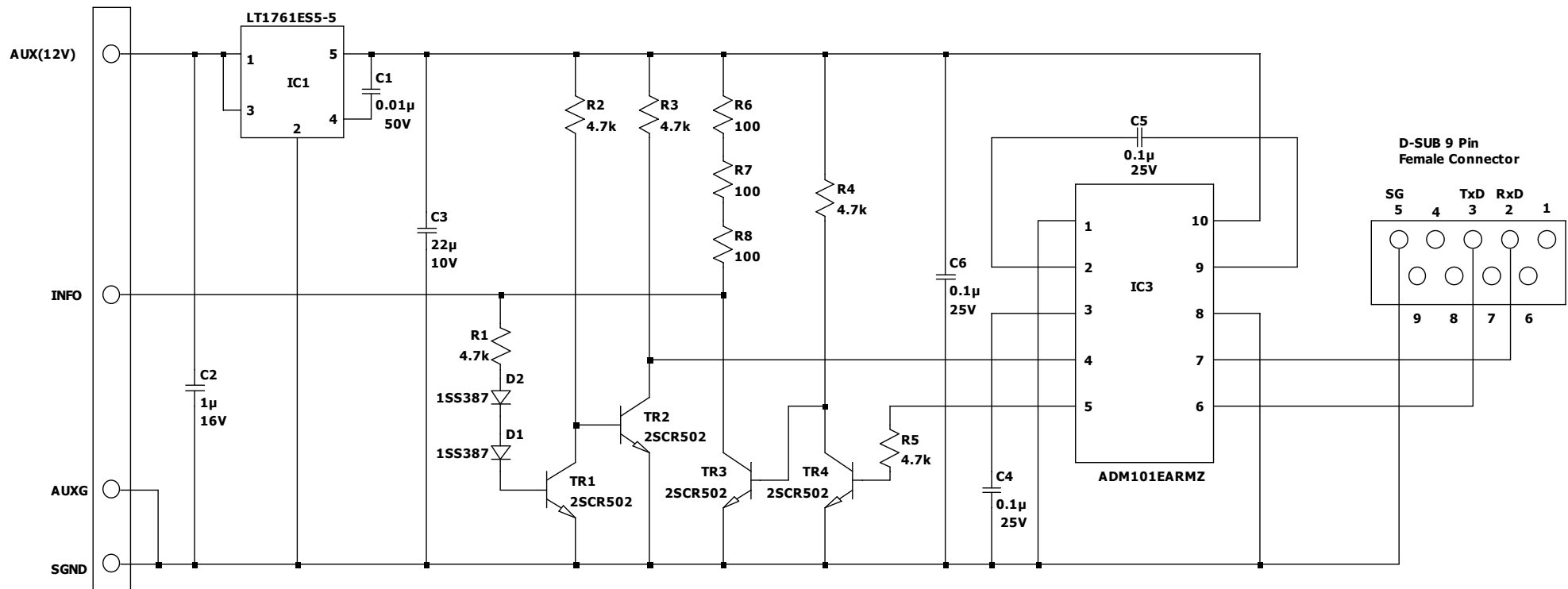
Introducing the unit that converts extended UART signals used in PCA series and AME series into RC232C signals.

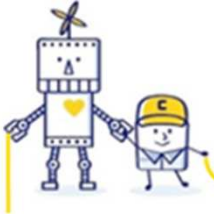




Conversion unit circuit diagram (Using the AUX supplied with PCA or AME)

- "AUX", "AUXG", and "INFO" should be connected to the corresponding pins of PCA or AME(-AI3 option).
- "SGND" should be connected to "SGND"(PCA) pin or "INFOG"(AME) pin.
- Up to 7 Extended UARTs can be connected.
(When multiple PSUs are connected, only one AUX supply is required.)



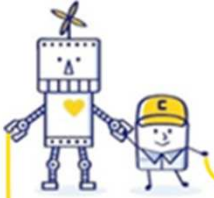


Unit parts list Example

Symbol	Type	Part number	Manufacturer
C1	0.01uF 50V	GRM155R11H103KA88D	MURATA
C2	1uF 16V	GRM155B31C105KA12D	MURATA
C3	22uF 10V	GRM21BD71A226ME44L	MURATA
C4, C5, C6	0.1uF 25V	GRM033R61E104KE14D	MURATA
D1, D2	-	1SS387	TOSHIBA
IC1	-	LT1761ES5-5	ANALOG DEVICES
IC3	-	ADM101EARMZ	ANALOG DEVICES
R1, R2, R3, R4, R5	4.7kΩ 1/10W	RK73B1ETTP472J	KOA
R6, R7, R8	100Ω 1/10W	RK73B1ETTP101J	KOA
TR1, TR2, TR3, TR4	-	2SCR502U3	ROHM

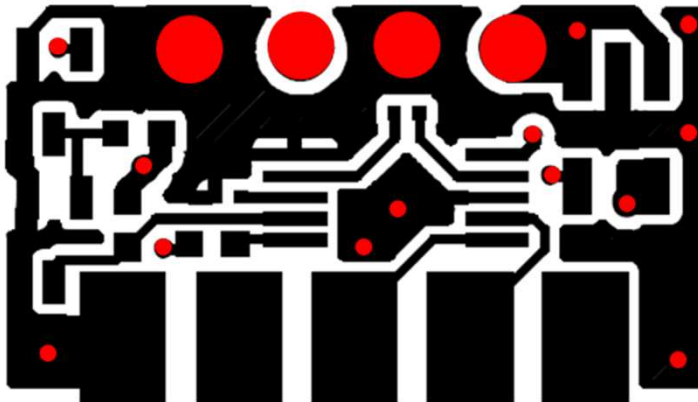
The part numbers are examples only; use equivalent parts.



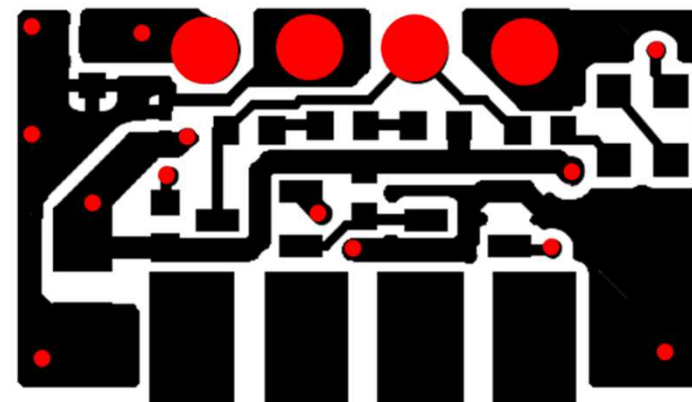


Example of board pattern and component layout for the conversion unit

Top side

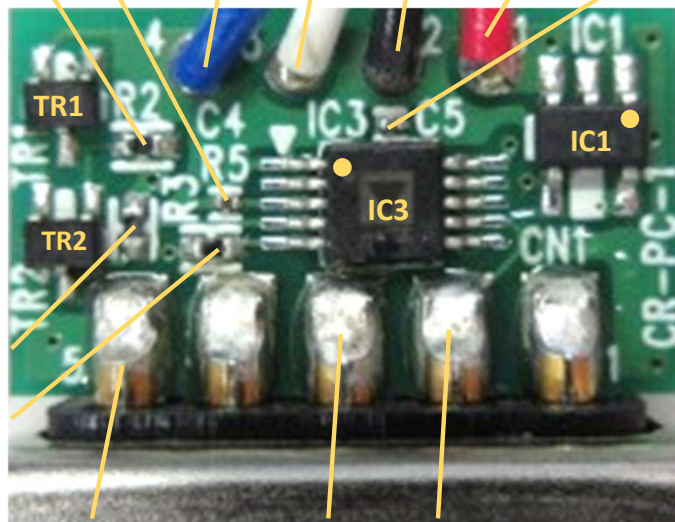


Bottom side (Bottom view)

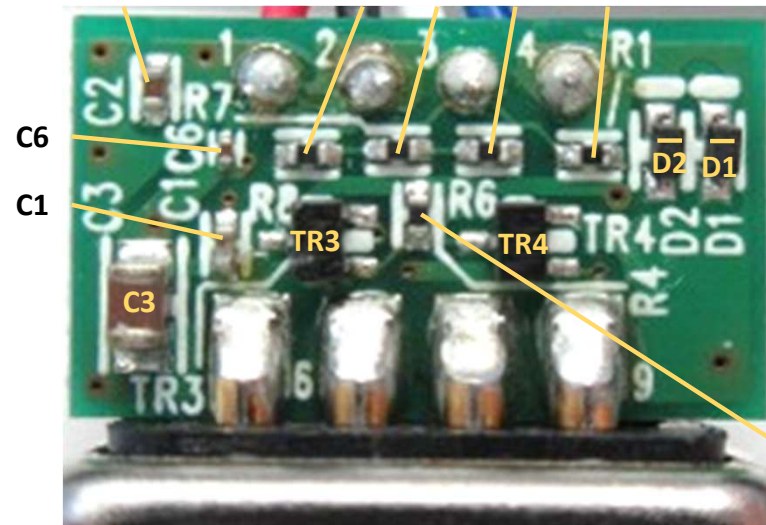


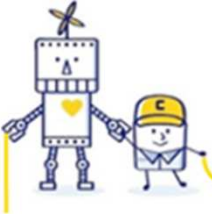
● :Through hole

R2 C4 SGND INFO AUXG AUX C5



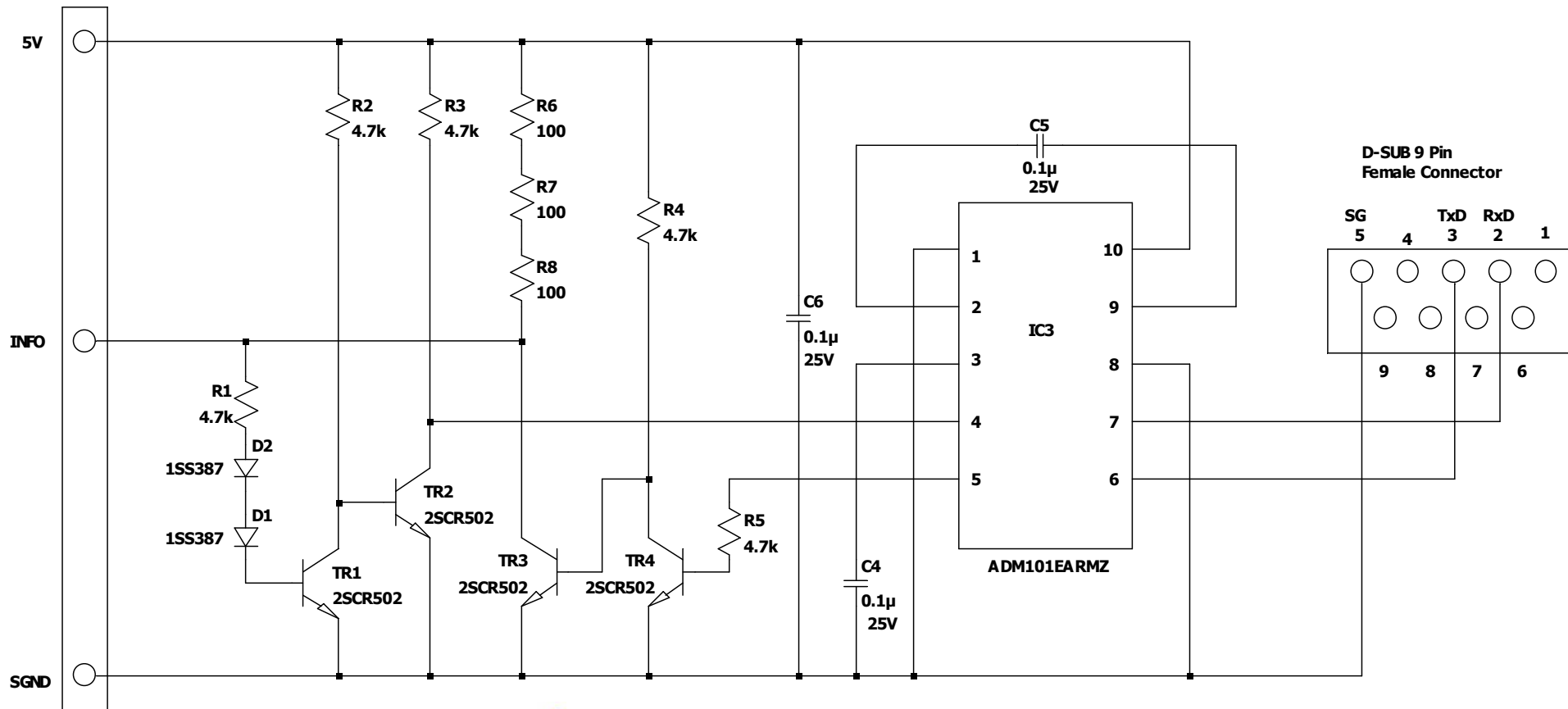
C2 R8 R7 R6 R1

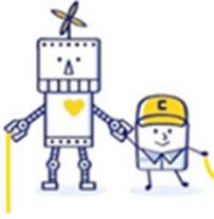




Conversion unit circuit diagram (Using external 5V)

- "INFO" should be connected to "INFO" pins of PCA or AME(-I3 option).
- "SGND" should be connected to "SGND"(PCA) pin or "INFOG"(AME) pin.
- Connect DC 5V between "5V" and "SGND".
- Up to 7 Extended UARTs can be connected.





Note:

The contents described in this document are those available at the time of publication and are subject to change without prior notice due to product improvement and corresponding changes in the specifications. please check the homepage of COSEL for the latest version.

We have paid full attention to ensure the accuracy of this document. We will not be responsible for any damages, including those due to misstatement and/or missing information, and indirect faults resulting from the use of the information in this document.

