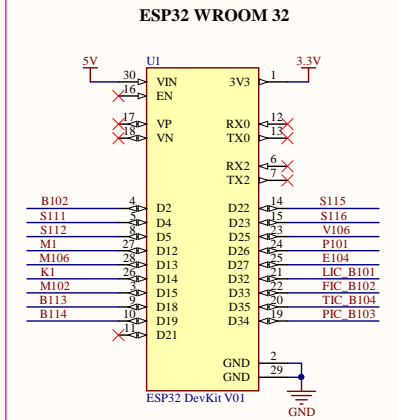
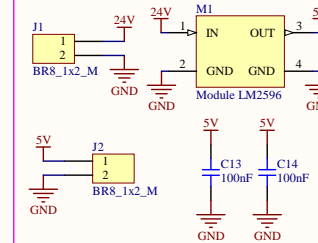


<u>IN_B102</u>	Sensor de vazão
<u>IN_B113</u>	Sensor capacitivo
<u>IN_B114</u>	Sensor capacitivo
<u>IN_S111</u>	Interruptor nível
<u>IN_S112</u>	Interruptor nível
<u>IN_S115</u>	Micro Relé para V102
<u>IN_S116</u>	Micro Relé para V102

<u>OUT_E104</u>	Aquecedor
<u>OUT_K1</u>	Relé controle analógico da bomba
<u>OUT_M1</u>	Relé controle binário da bomba
<u>OUT_M102</u>	Aciona válvula esférica
<u>OUT_M106</u>	Aciona válvula proporcional

<u>IN_FIC_B102</u>	Sensor de vazão
<u>IN_LIC_B101</u>	Sensor de nível ultrassônico
<u>IN_PIC_B103</u>	Sensor de pressão
<u>IN_TIC_B104</u>	Sensor de temperatura

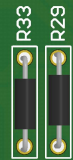
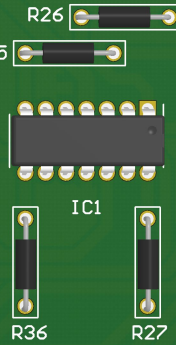
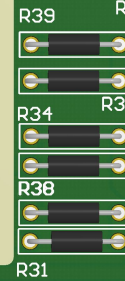
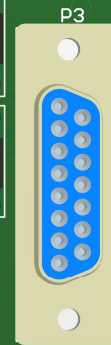
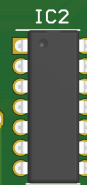
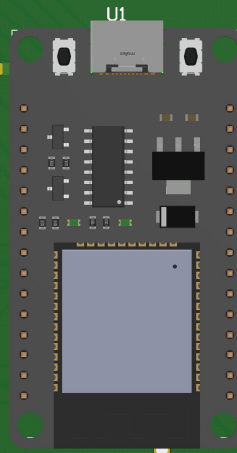
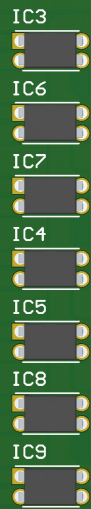
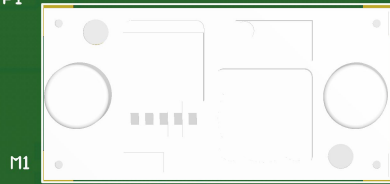
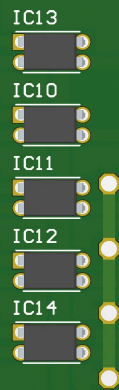
<u>OUT_P101</u>	Bomba centrífuga
<u>OUT_V106</u>	Válvula proporcional controle de vazão



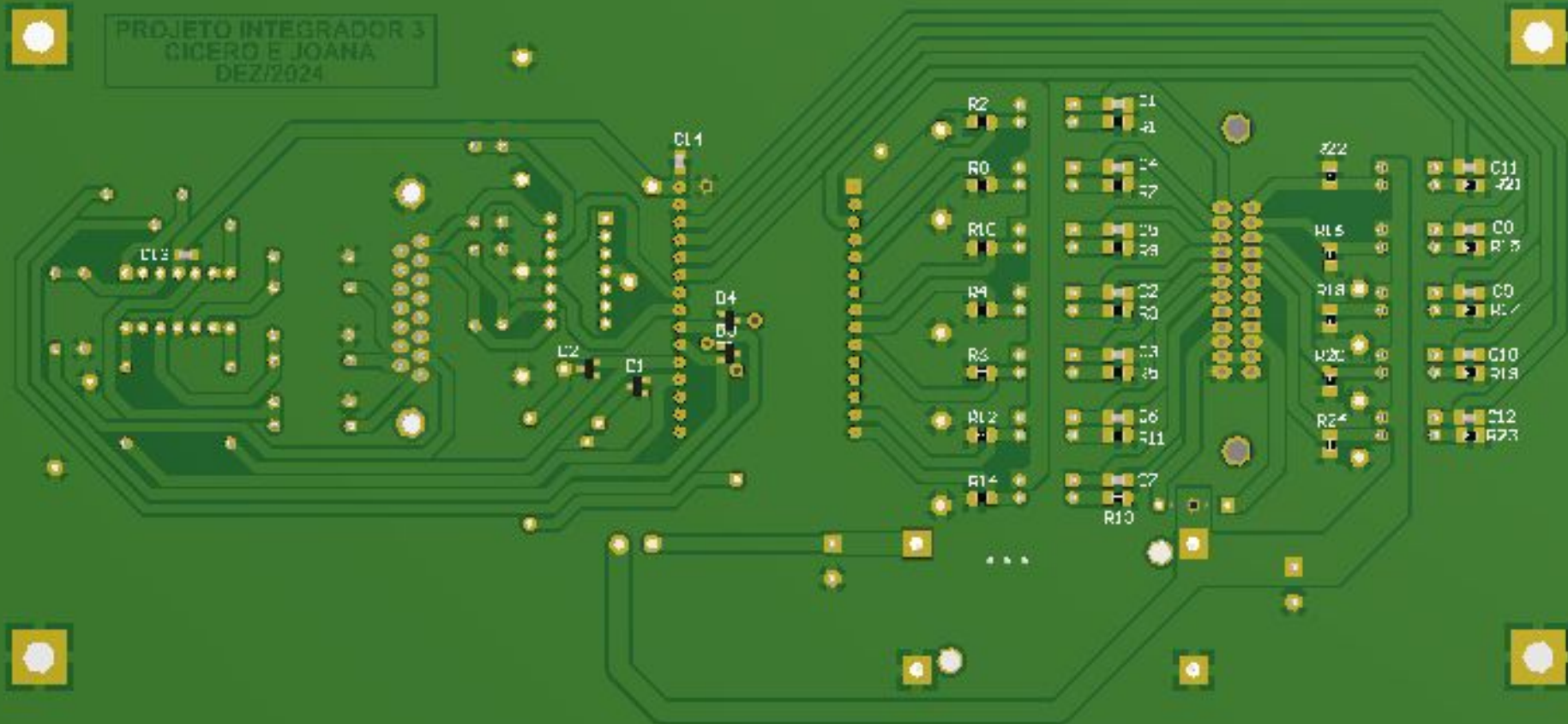
The schematic diagram shows six identical signal conditioning channels, labeled IC3 through IC9. Each channel is based on a PC817C optoisolator. The input signal (IN B102, IN B113, IN B114, IN S111, IN S112, IN S115, IN S116) is connected to the input pin (pin 1) of the optoisolator. A 10nF capacitor (C1-C7) is connected between the input pin and ground. A 1K resistor (R1-R8) is connected between the input pin and the output pin (pin 4). The output pin (pin 4) is connected to the output signal (B102, B113, B114, S1, S112, S115, S116). The output pin is also connected to a 3.3V supply. The optoisolator is represented by a yellow box with pins 1, 2, 3, and 4. The internal components are labeled A\_1, K\_1, C\_1, and E\_1. The input and output pins are labeled IN and OUT respectively. The output signal is labeled B102, B113, B114, S1, S112, S115, and S116. The 3.3V supply is labeled 3.3V.

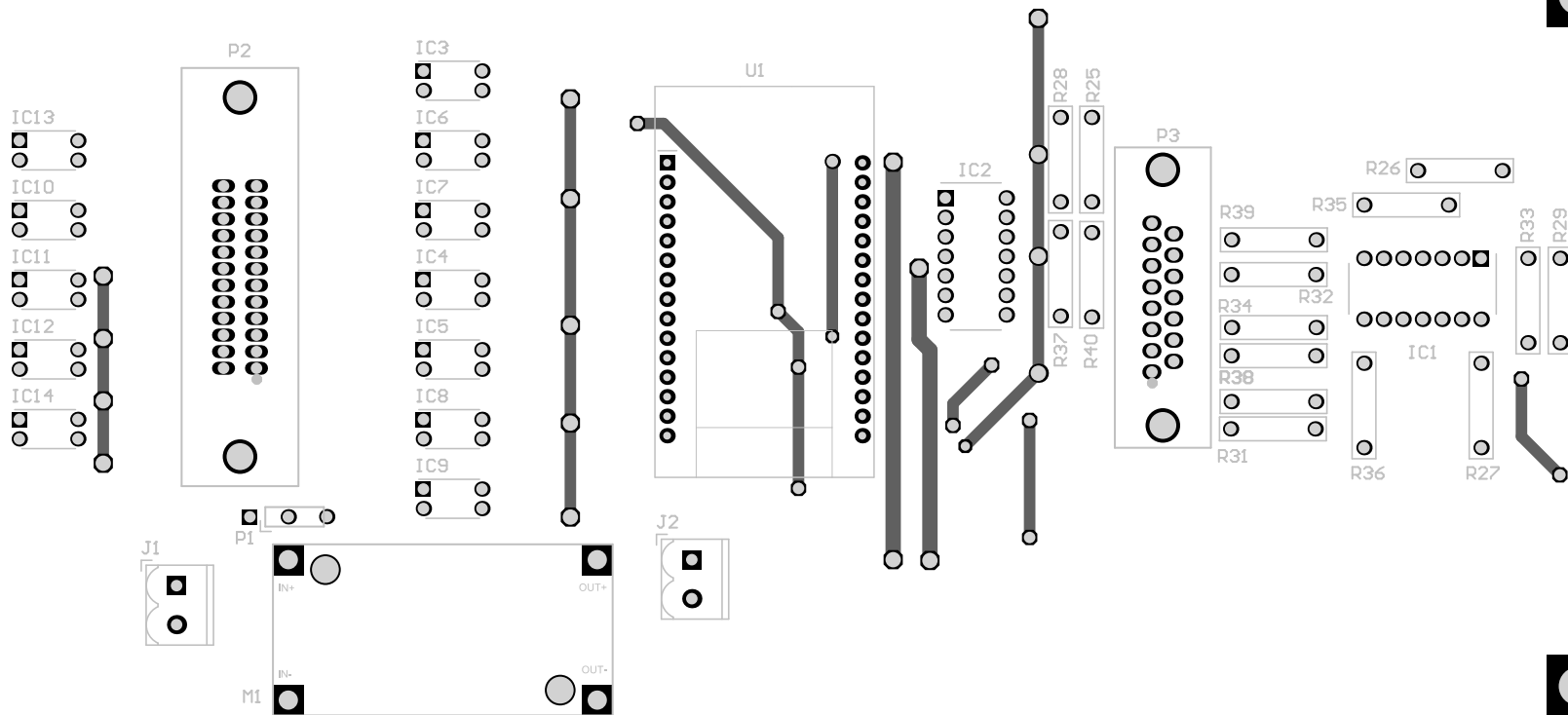
Figure 1 shows the pin connections for three headers: P1, P2, and P3. P1 (24VA) is connected to Header\_1x3\_M (24V, 24VB). P3 (DB15\_2x8x7) is connected to OUT\_P101, OUT\_V106, GND, IN\_FIC B102, IN\_LIC B101, IN\_TIC B104, IN\_PIC B103, and DB15\_2x8x7. P2 (Connector 2x12 180°) is connected to OUT\_M102, OUT\_E104, OUT\_K1, OUT\_M1, OUT\_M106, IN\_B102, IN\_S111, IN\_S112, IN\_B113, IN\_B114, IN\_S115, IN\_S116, 24VA, and 24VB.

The figure displays four identical circuit diagrams, each representing a different optocoupler (IC10, IC11, IC12, IC13, IC14) used for 3.3V signal isolation. Each circuit includes a 24V supply, a 10nF capacitor, a 1K resistor, and a 1K load resistor. The output is labeled as OUT\_E104, OUT\_K1, OUT\_M1, OUT\_M102, and OUT\_M104 respectively.



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