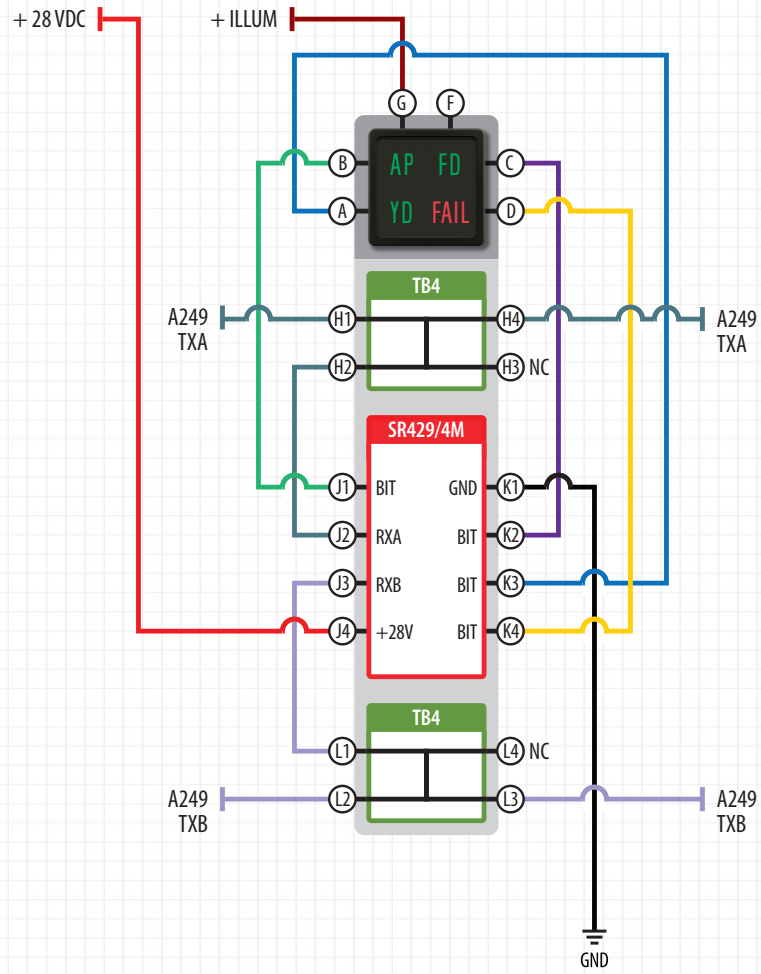
Autopilot Status Indication

This application diagram depicts an autopilot system status annunciator with a built-in multi-bit converter. The converter reads the ARINC 429 data and decodes the selected label and bits. Each bit has a dedicated output which when active, illuminate indicators that correspond to the active status of the autopilot system.

The design uses a single annunciator that has a VIVISUN High Capacity Body which houses the NEXSYS ARINC 429 Multi-Bit Convert (SR429/4M) and Terminal Block (TB4) components. The SR429/4M reads and decodes the ARINC 429 data. The TB4s are used in place of external splices to bus the ARINC 429 transmit (TX) signals to the SR429/4M and possibly other SR429/4M converters.

The SR429/4M receives ARINC 429 data via inputs RXA and RXB (J2 & J3) which are connected to the transponder TXA and TXB outputs via the TB4 (H2 and L1). The SR429/4M is configured to read and decode ARINC 429 label 300, bits 17, 18, 19 and 20. Based on the data, the SR429/4M will output discrete low (ground) signals from the dedicated bit outputs that correspond to the status of the autopilot system. Bit output 17 (J1) corresponds to AP (B), 18 (K2) corresponds to FD (C), 19 (K3) corresponds to YD (A), and 20 (K4) corresponds FAIL (D).

To speak with our Technical Support team on how NEXSYS Component Technology can be used to add avionics system capabilities or solve your system integration challenges call us at 1-888-848-4786.



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