Brief Write-up of Technology

Title “Fire Control Unit for Avionics Application”

A fire control unit receives the signals from fire detection system installed at various locations in the aircrafts and helicopters, processes the signals for confirming the fire and no fire event and operates the automatic extinguishers bottles for extinguishing the fire. Earlier technology was designed using analog processing of signals which sometimes leads to false actuation of extinguishers bottles and sometimes emergency landing of aircrafts or helicopters. This new technology is processing the signals in the digital environment under software control running in the memory of processing device like microcontroller. This technology uses analog-to-digital converter to receive analog signals generated from a plurality of fire sensors like thermocouples where the analog signals correspond to temperature in a region of the aircraft. Fire and no fire signal is to determined by voltage corresponding to the digital signals to be in a pre-determined voltage range for a pre-determined time interval, for ascertaining the presence of fire in the region. This technology can be used for IL-76, An-32 aircrafts and Mi-series of helicopters. Photograph of the unit as shown below