Table 3 – FPGA BASED VERY HIGH SPEED PCIE DIGITIZER CARD
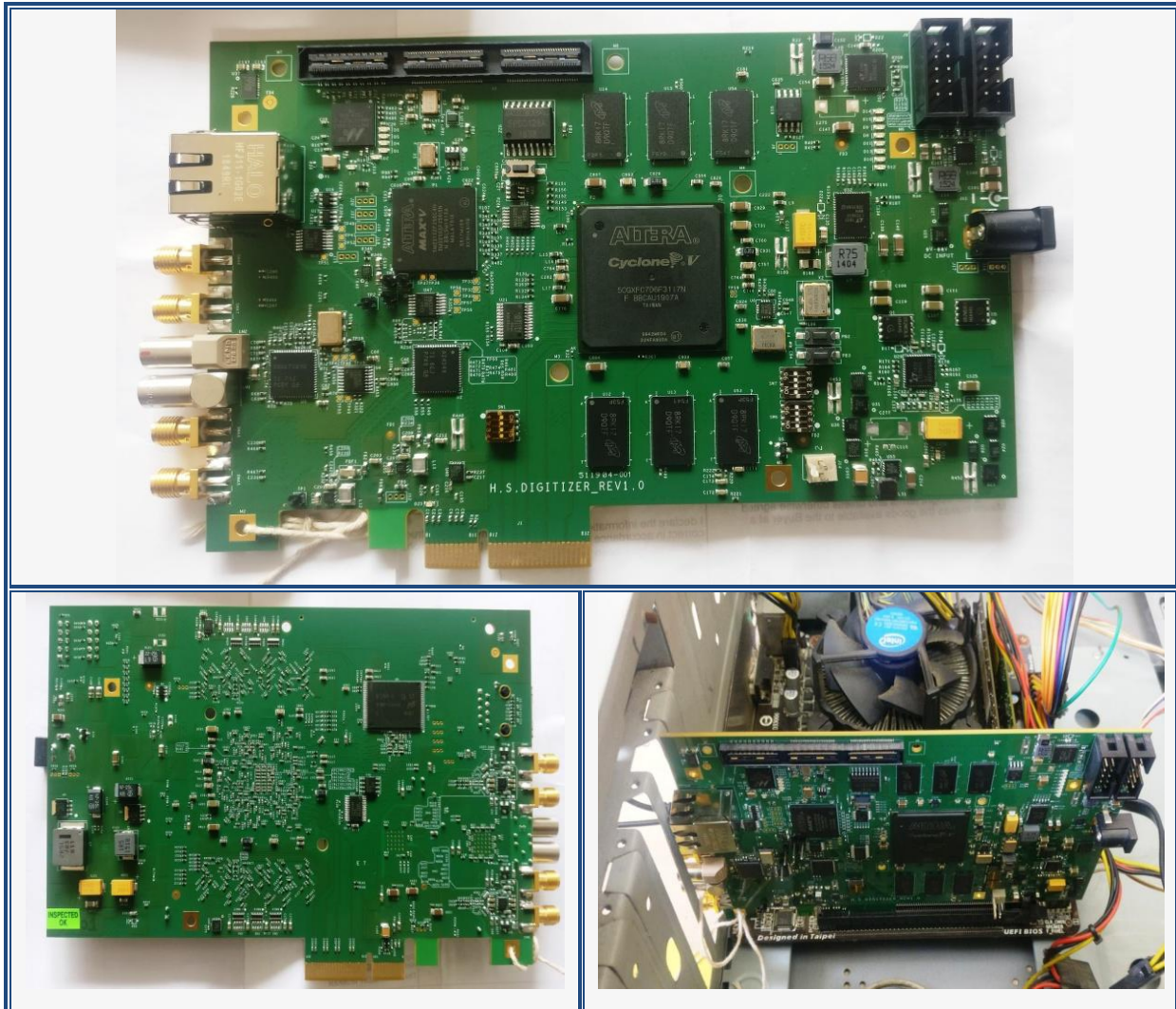

This is a very high speed digitization and signal processing card having standard PCI express form factor – 165mm by 106mm consisting of the followings:-

- **2 Channel, 14 bit, 250 MSPS ADC for each channel.**
- **CYCLONE V GX FPGA having very high speed transceiver, high logic density and dual Hard Memory Controllers.**
- **CPLD for clock generation, glue logic and Fast Passive Parallel programming interface.**
- **Dual 4GB DDR3 SDRAM Memory with Error Detection and Correction, each having 800 MTS interface.**
- **Active Clock Jitter Cleaners.**
- **Active serial flash for serial flash configuration for FPGA.**
- **1Gb, parallel NAND / NOR Flash for 16 bit Fast Passive Parallel programming interface.**
- **On board RGMII ETHERNET Interface having TRI-MODE Ethernet MAC 10/100/1000 Mbps.**
- **PCIe 2.5Gbps X 4 Lane allowing DMA data and control transfer at the rate of 10Gbps with COTS / PC.**
- **JTAG Interface for ISP.**