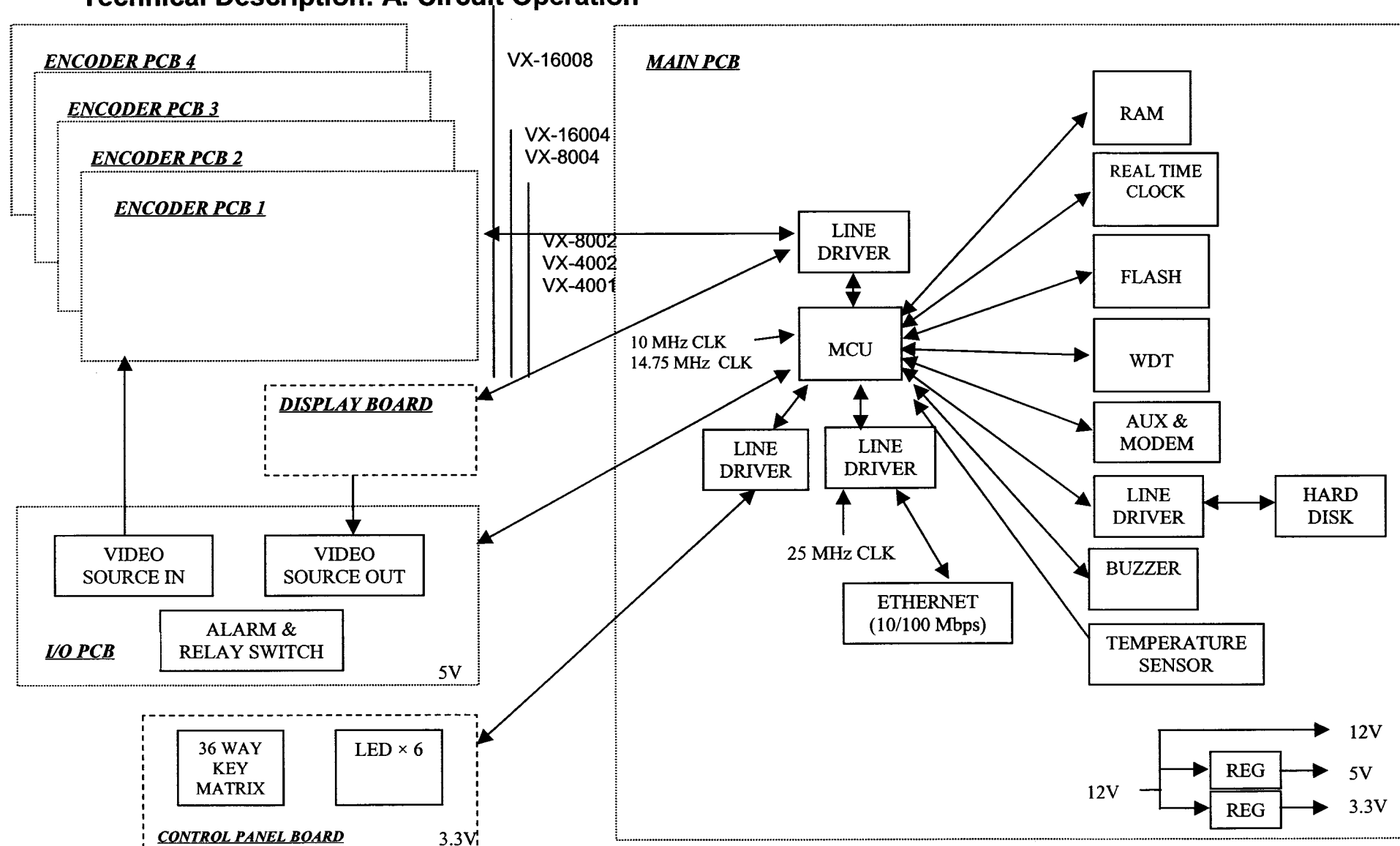
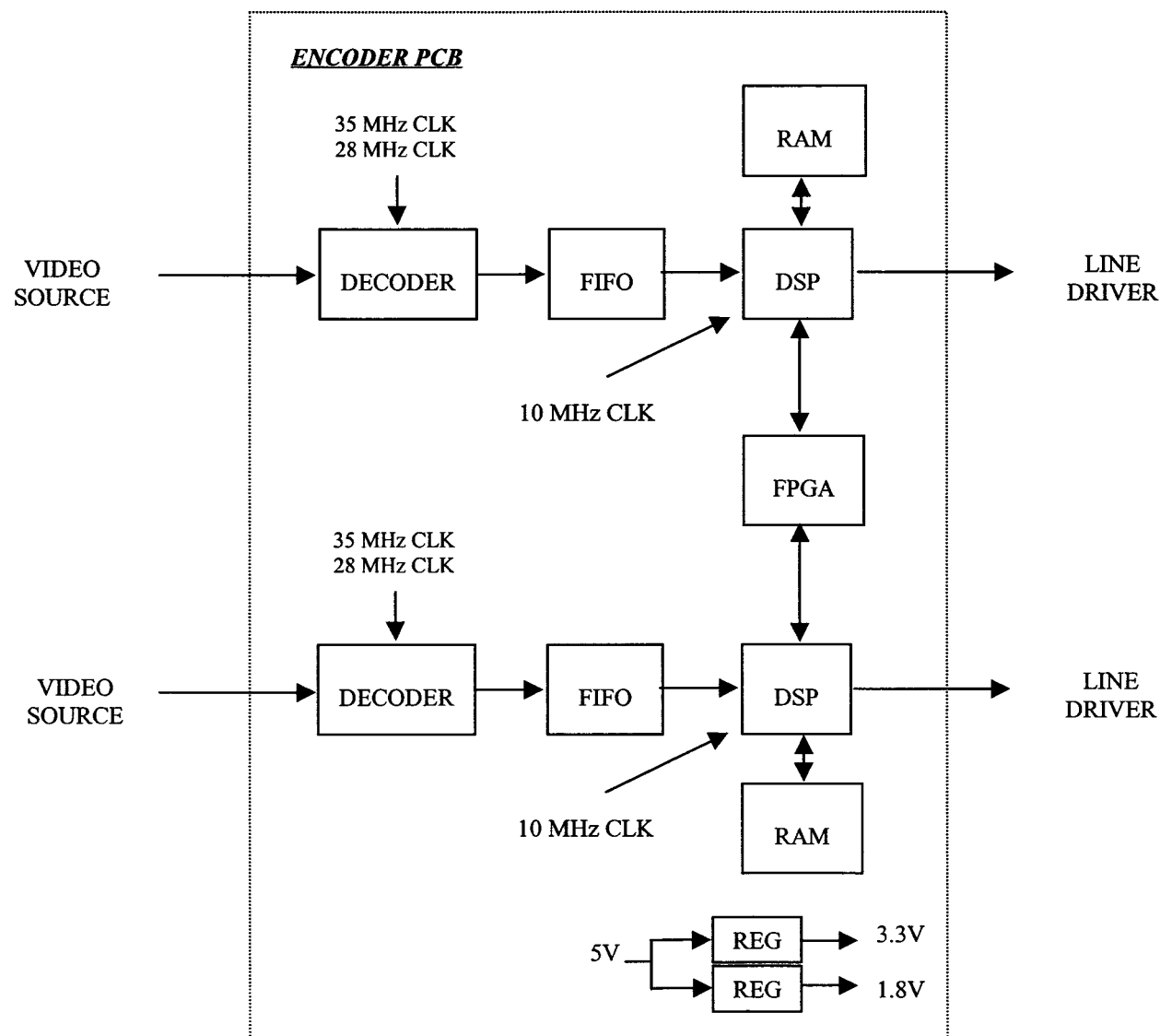
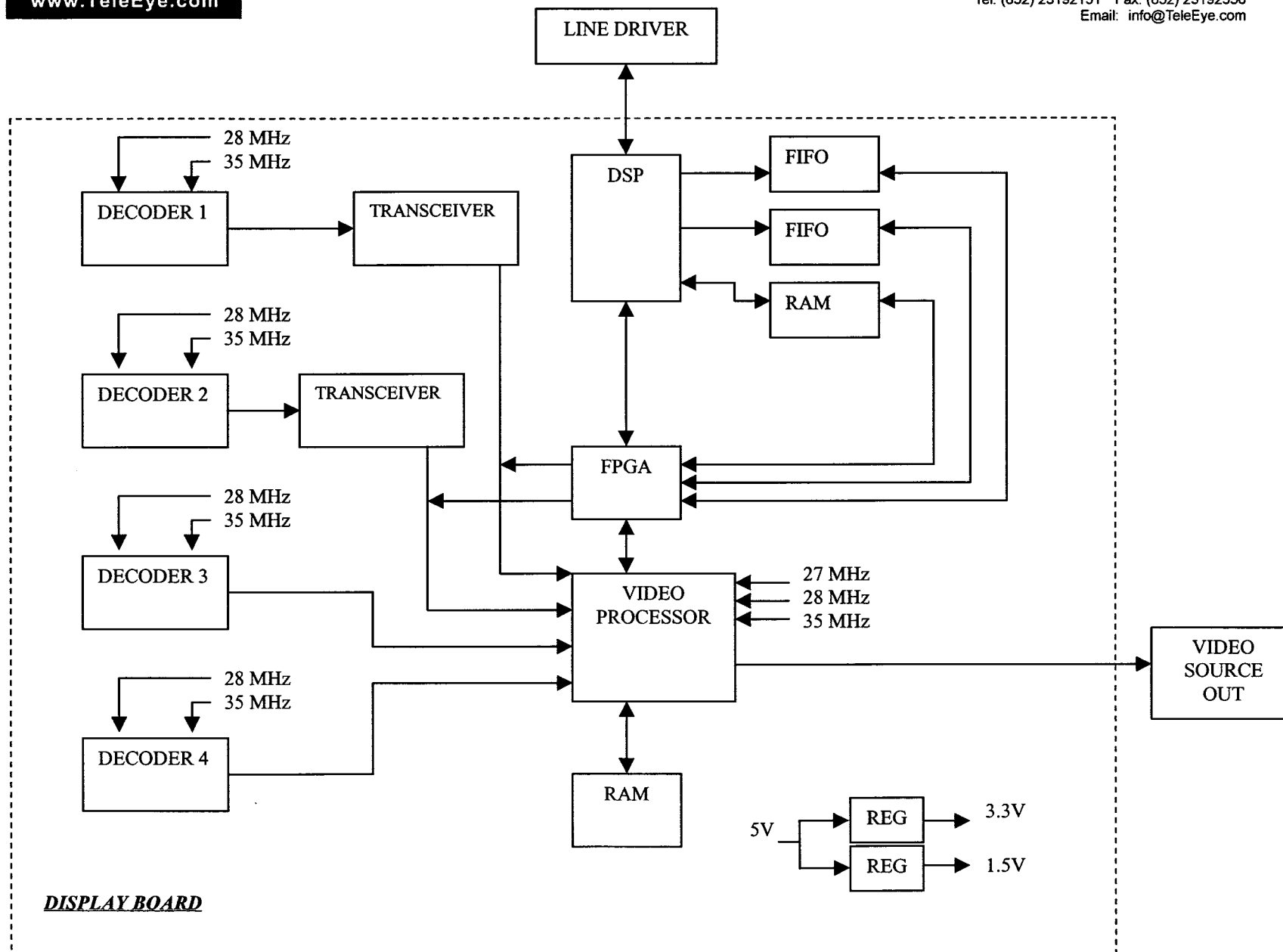


Technical Description: A. Circuit Operation



VX System Block Diagram





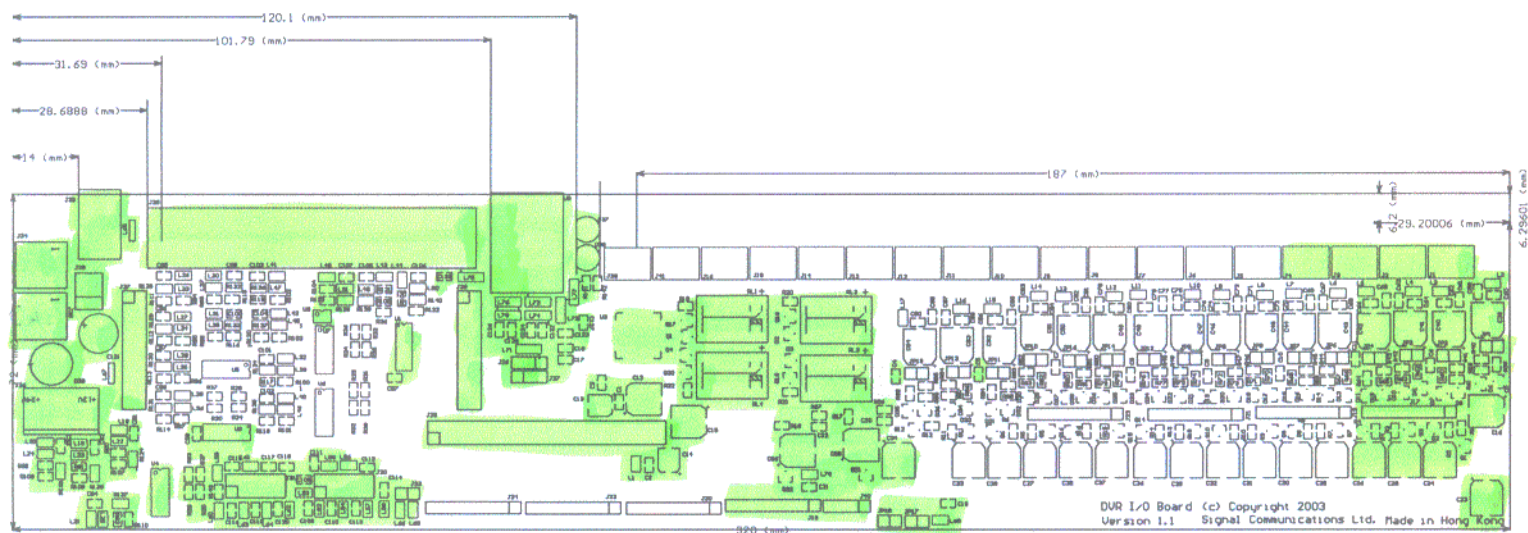
B. Component Description

PCB Board	Category	Name	Description
Main Board	Integrated Circuit	U3, U4	Line drivers
Main Board	Integrated Circuit	U5-Flash	Store application program & for MCU startup
Main Board	Integrated Circuit	U6, U7-RAM	Store data
Main Board	Integrated Circuit	U8	Watchdog timer
Main Board	Integrated Circuit	U9, U10	Reset
Main Board	Integrated Circuit	U15-SC 6030	Main system controller.
Main Board	Integrated Circuit	U16, U17	Address decoding
Main Board	Integrated Circuit	U18, U19—Line Driver	Drive up the voltage signals for transmission
Main Board	Integrated Circuit	U22-LXT971ALC	Image delivery through the Ethernet
Main Board	Integrated Circuit	U25	Temperature Sensor
Main Board	Integrated Circuit	U26	Buzzer
Main Board	Integrated Circuit	U27	System control
Main Board	Integrated Circuit	U28-Real Time Clock	Support Time Clock
Display Board	Integrated Circuit	U1	Video Processor
Display Board	Integrated Circuit	U2, U3-RAM	Store data
Display Board	Integrated Circuit	U4, U5	Store the digit data in FIFO format.
Display Board	Integrated Circuit	U6-ASIC	Perform the logic control
Display Board	Integrated Circuit	U7	Decode the video data
Display Board	Integrated Circuit	U11,U12,U13,U14	Video Decoder
Display Board	Integrated Circuit	U15, U16	Line Drivers
DSP	Integrated Circuit	U1, U3-Decoder	Convert video signal from analog to digital
DSP	Integrated Circuit	U2, U4-FIFO	Store the digital data in the FIFO format.
DSP	Integrated Circuit	U5, U11-DSP	Encode & compress the digital data.
DSP	Integrated Circuit	U8, U12-RAM	Store the data temporarily.
DSP	Integrated Circuit	U14-FPGA	Perform the logic control.
IO Board	Integrated Circuit	U1, U2	Shift Register
IO Board	Integrated Circuit	U3	Alarm & Relay control



IO Board	Integrated Circuit	U4, U5, U6, U7	Photo-coupler
IO Board	Integrated Circuit	U8	Photo-coupler
IO Board	Relays	RL1, RL2, RL3, RL4- Relays	Control devices
Control Panel Board	Integrated Circuit	U1, U2	Address decoding
Control Panel Board	Integrated Circuit	U3	LED control
Control Panel Board	Integrated Circuit	U4	Logic Control
HDD Interface Board	Integrated Circuit	U1	3.3V Regulator
HDD Interface Board	Integrated Circuit	U2	Line Driver
DSP Interface Board	Integrated Circuit	U1	3.3V Regulator
DSP Interface Board	Integrated Circuit	U2	Line Driver

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Silkscreen for IO Board:

Highlighted the Essential Components for:

VX: 4001, VX-4002

VX: 8002, VX-8004

Highlighted the Essential Components for:

VX: 16004, VX-16008