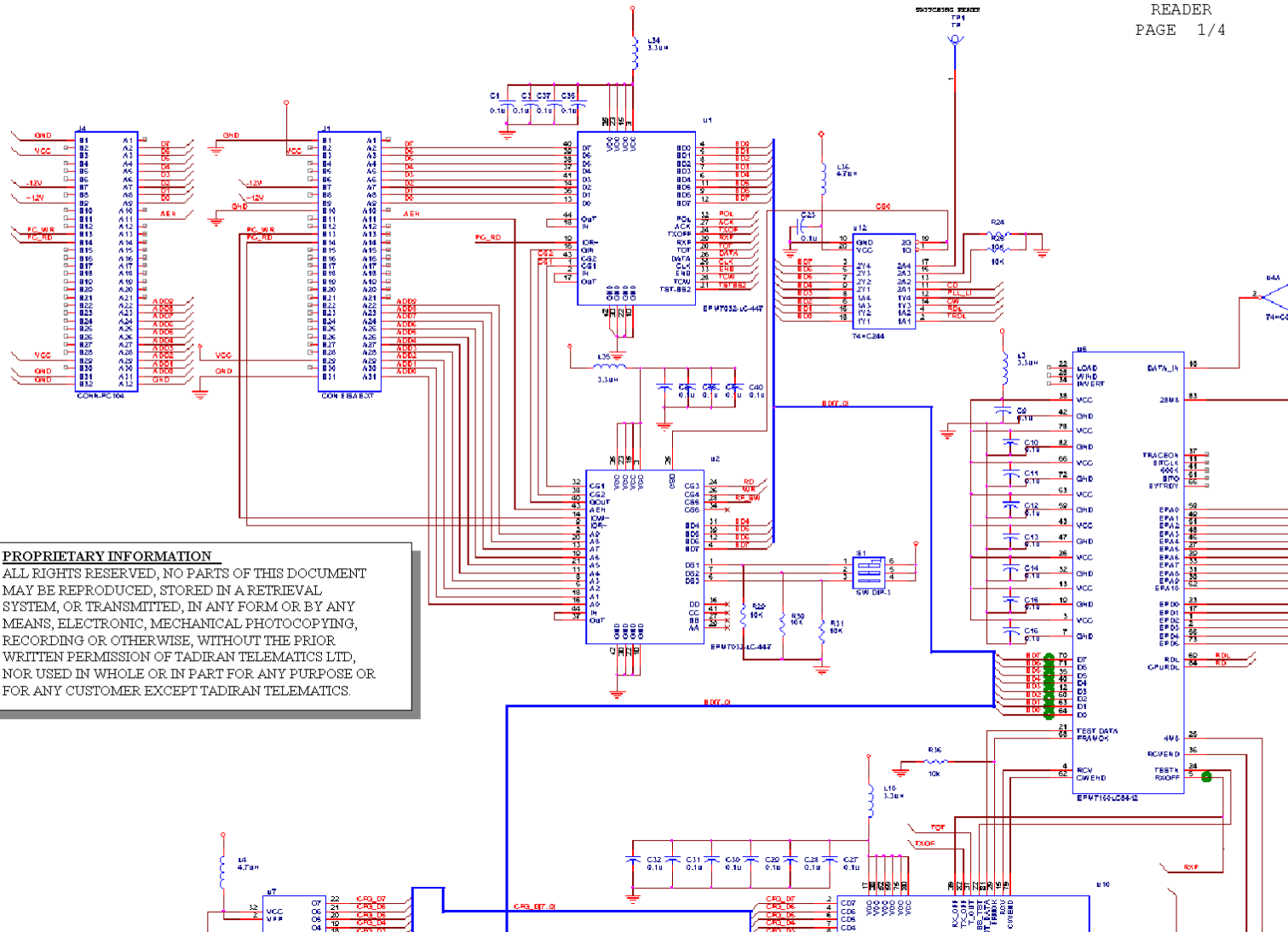
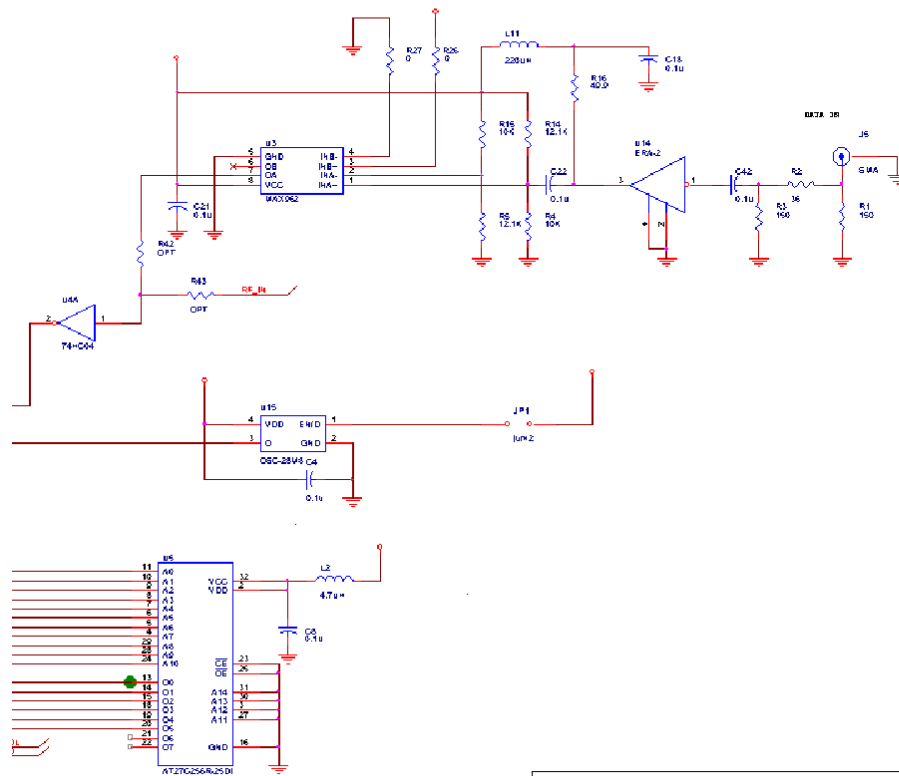


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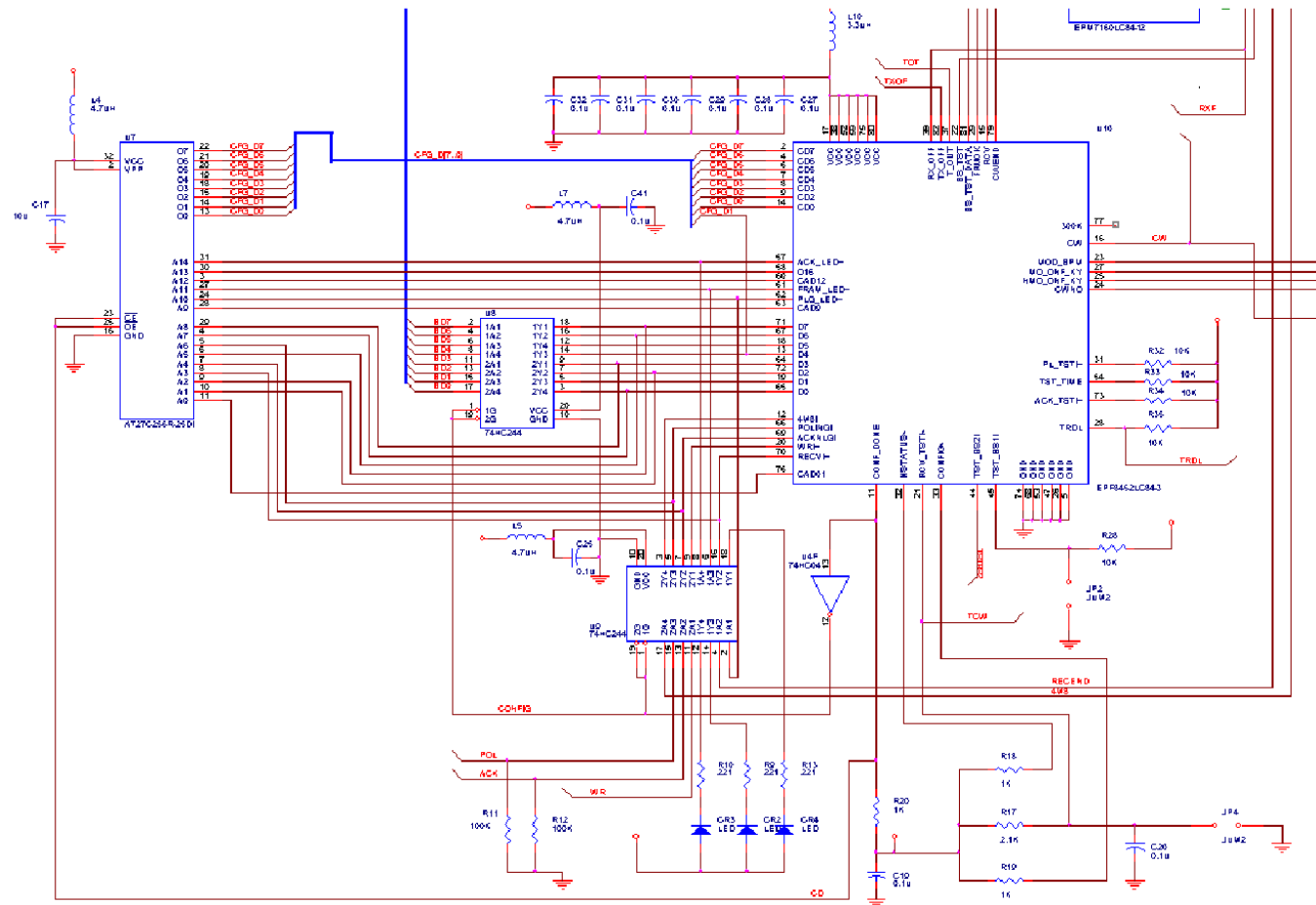
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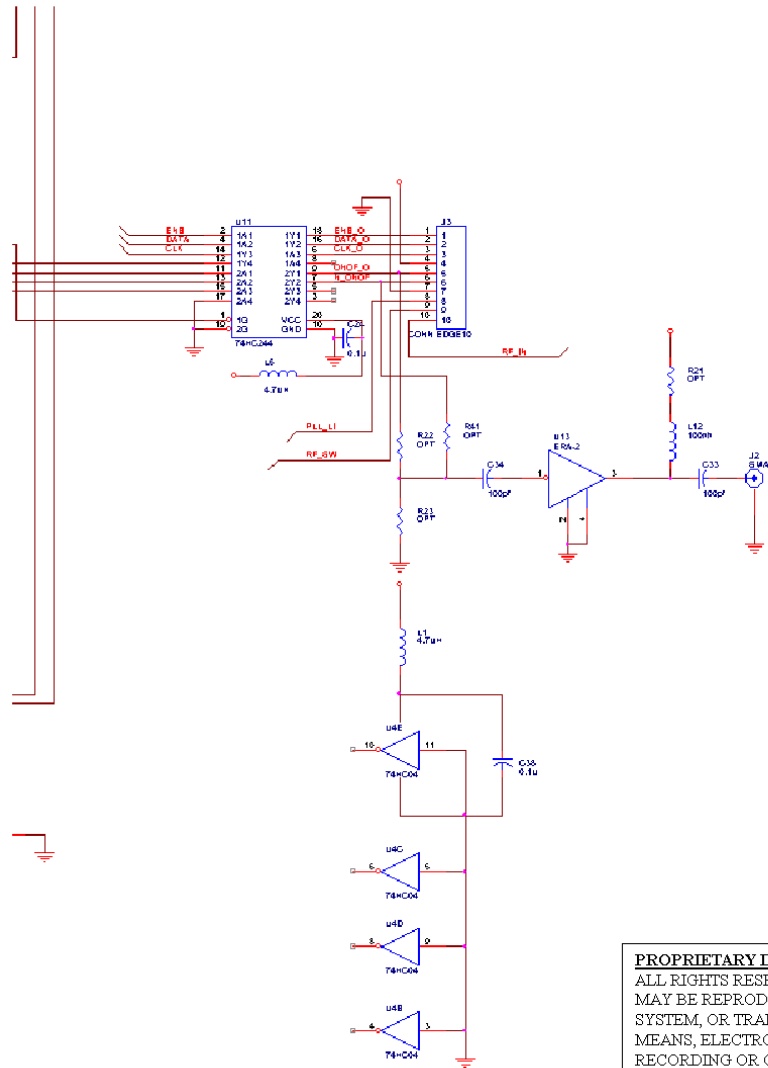
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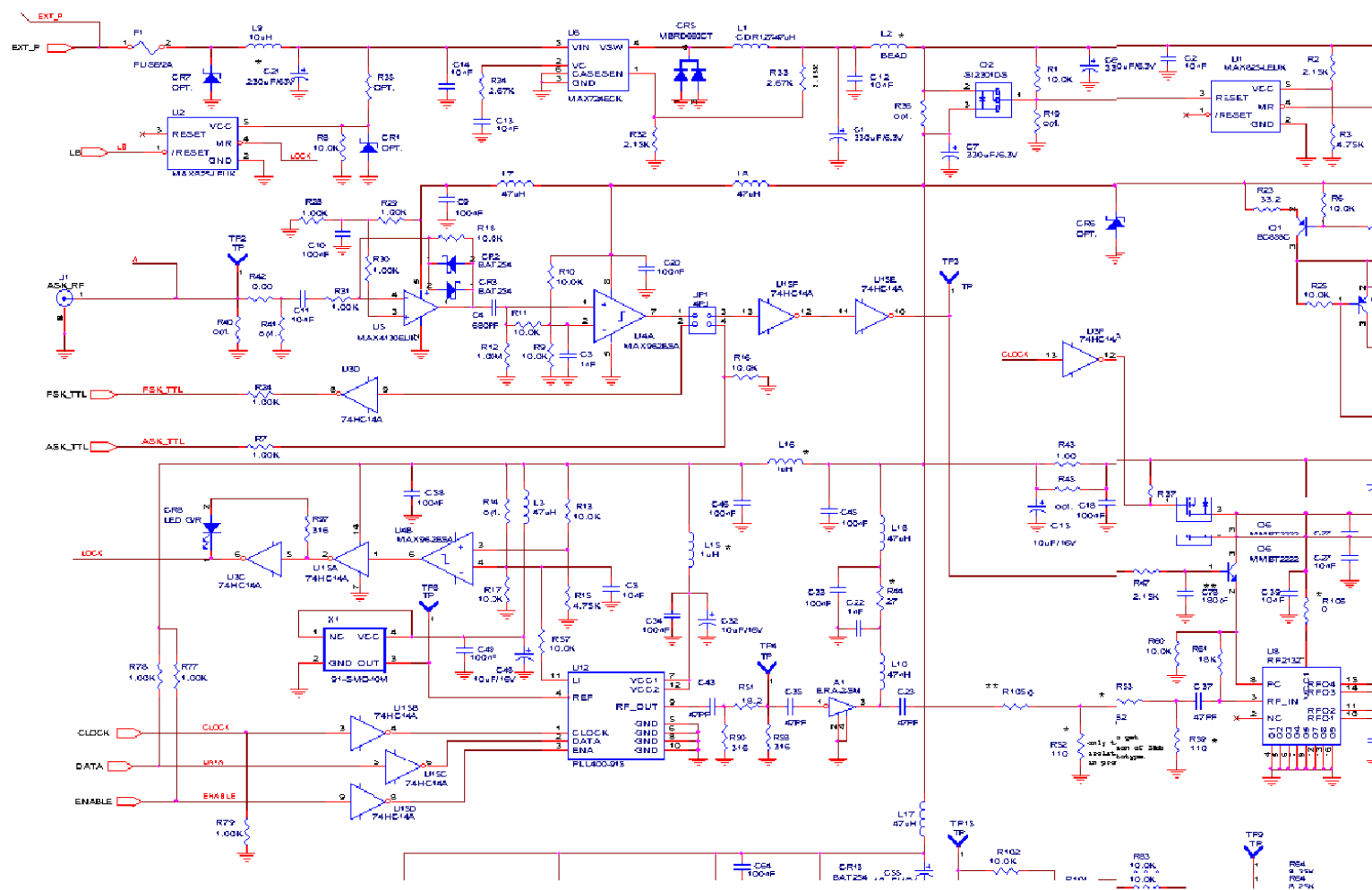
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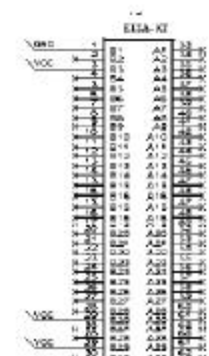
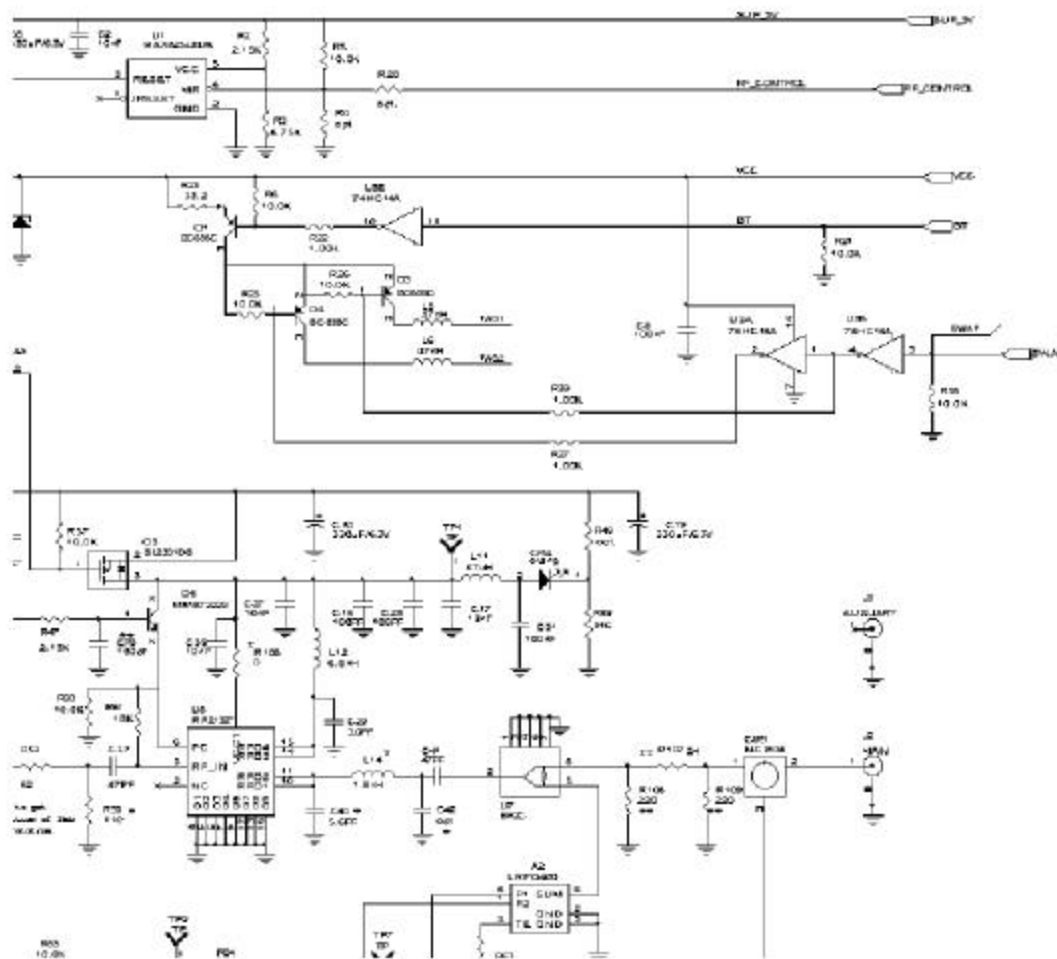
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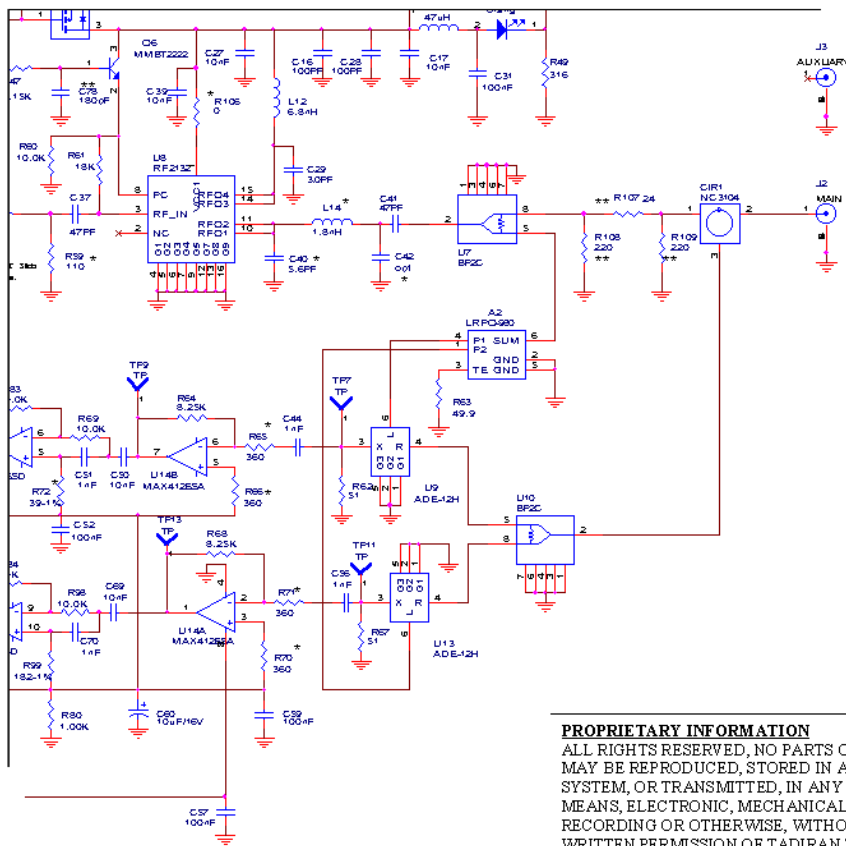
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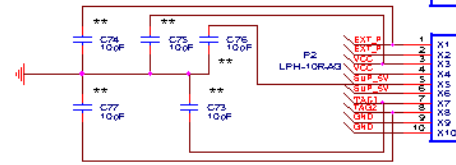
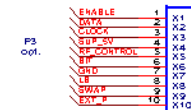
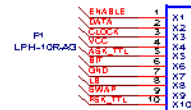
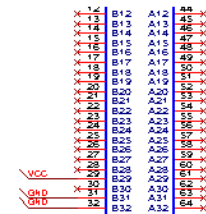
RFU schematic diagram

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SBC-456/E

486DX5-133

Half-size CPU Card

with LCD, Ethernet, & SSD

CPU Onboard

- ① AMD 486 DX5-133 CPU (SQFP)
- ② Flat Panel Display Connector
- ③ 10Base-T Ethernet Connector
- ④ CRT Connector
- ⑤ ALi M1487/1489 Chipset
- ⑥ Socket for DiskOnChip®



Features

- Onboard AMD 486DX5-133 CPU (SQFP)
- C&T 65550 LCD controller with 2MB EDO memory
- 10Base-T Ethernet
- Supports DiskOnChip® (SSD) up to 288MB
- PC/104 expansion connector

Specifications

General Functions

CPU	AMD 486DX5-133 SQFP
CPU type	Onboard SQFP
Bus Interface	ISA bus
BIOS	AMI 128KB FLASH BIOS
Chipset	ALi M1487/1489
I/O Chipset	ITE IT8661F. Fully 16-bit I/O decoded
L2 Cache	Onboard 128KB level two Cache. Could be upgraded to 512KB by factory
Memory	Onboard two 72-pin SIMM sockets support up to 128Mbytes Fast Page or EDO DRAM
Enhanced IDE	Supports two IDE devices. Supports Bus Master mode with data transfer rate 16.7MB/sec.
FDD interface	Supports two floppy disk drives, 5.25" (360KB and 1.2MB) and/or 3.5" (720KB, 1.44MB, and 2.88MB)
Parallel port	One bi-directional parallel port. Supports SPP, ECP, and EPP modes
Serial port	One RS-232 and one RS-232/422/485 serial port. Ports can be configured as COM1, COM2, COM3, COM4, or disabled individually. (16C550 equivalent)
KB/Mouse connector	6-pin mini-DIN connector supports PC/AT keyboard and PS/2 mouse. Additional 5-pin header supports PC/AT keyboard for IPC applications
Real Time Clock	Dallas DS-12887A or equivalents, powered by lithium battery for data retention
Watchdog timer	Can generate a system reset, IRQ15, or NMI. Software selectable time-out interval (2 sec. ~128 min., 1 sec./step)
DMA	7 DMA channels (8237 equivalent)
Interrupt	15 interrupt levels (8259 equivalent)
Power management	I/O peripheral devices support power saving and doze/standby/suspend modes. APM 1.1 compliant

Flat Panel/CRT Interface

Chipset	C&T 65550
Display memory	1MB onboard, 2MB optional
Display type	Supports non-interlaced CRT and LCD (TFT, DSTN, and MONO) displays. Can display both CRT and Flat Panel simultaneously
Resolution	Up to 1024x768@64K colors (CRT/LCD simultaneous display)

Ethernet Interface (SBC-456E only)

Chipset	Realtek RTL8029AS 10Base-T Ethernet controller
Ethernet interface	Onboard 10Base-T RJ-45 connector. Optional Remote boot ROM function

SSD Interface

One 32-pin DIP socket supports M-Systems DiskOnChip® 2000 series up to 288MB

Expansion Interface

PC/104 connector	One 16-bit 104-pin connector onboard
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Mechanical and Environmental

Power supply voltage	+5V (4.75V to 5.25V), +3.3V, -12V
Operating temperature	32 to 140° F (0 to 60° C)
Board size	7.3"(L) x 4.8"(W) (185mm x 122mm)
Weight	0.3Kg

* Please refer to our website for detailed power consumption information.