- o 100% Software compatible with TRS-80™ Model I
- o Fast 4MHZ, Z80A microprocessor
- o 12k Bytes of ROM; 16k Bytes of RAM
- o Ultra high resolution color graphics (384 x 192, 8 colors, RGB output)
- o Ultra high resolution B/W graphics (480 x 192)
- o High resolution color graphics (128 x 192, 8 colors, NTSC composite video or RFMOD)
- o Standard TRS-80™ character set and graphics (128 x 48) with 8 levels of gray scales
- o Upper and lower case display
- o Reverse video
- o Composite video
- o RF Modulator
- o Expansion bus
- o Cassette interface
- o On board power supply
- o Solder mask; silk screened reference
- o Build what you need
- o Superb documentation

INTRODUCING the LNW80 - the high-speed color computer totally compatible with the TRS-80™. The LNW80 gives you the edge in satisfying your computation needs in business, scientific and personal computation. With performance of 4 MHZ, Z80A CPU, you'll achieve performance of over twice the processing speed of a TRS-80™. This means you'll get the performance that is comparable to the most expensive microcomputer with the compatibility to the world's most popular computer (TRS-80™) resulting in the widest software base.

DISPLAY

LNW80's superior graphics clearly the finest black and white (B/W) and color graphics, are available from LNW Research.

The LNW80 displays are designed for hi-resolution computer data graphics in B/W and color, while offering total compatibility to the standard TRS-80™ graphics. You may even intermix the standard TRS-80™ text (graphics) with the LNW80's ultra hi-resolution B/W graphics. Color mapping on the LNW80 results in compatibility with the TRS-80's™ standard graphics. The color mapping allows current TRS-80™ graphics to turn on and off the mapped areas of color. This mapping feature allows the current TRS-80™ graphic programs to be in color without changes to the existing software.

Our LNW80, with the most advanced TRS-80™ compatible grahics, are examples of the state of the art technology developed by LNW Research. Check the display specifications and you'll clearly see the advantage of the LNW80 graphics.

BUILD WHAT YOU NEED

We know that everyone may not need all the features of our LNW80 Board and why pay for something you don't need?

By offering the bare PC board and providing PARTS LISTS BY SECTIONS, you can build the board according to your current needs and expand later. This MODULARITY serves to further reduce the cost of your computer.

SUPERB DOCUMENTATION

With every circuit board comes a COMPREHENSIVE USERS MANUAL. This detailed manual features Parts Lists, Assembly Instructions, Testing Sections, Circuit Descriptions, Troubleshooting Information and Schematics.

SOFTWARE COMPATIBLE

Since the LNW80 Board is fully SOFTWARE COMPATIBLE with the TRS-80™, no patches or special software is required.

If you have been searching for the ultimate computer that combines the powerful features and high performance that you need, at a price you can afford - your search is over. The LNW80 Board is available today.

Contact your local computer retailer or 'LNW Research.'

LNW80 SPECIFICATIONS

I. ELECTRICAL

   A. Processor

      1. Z80A CPU (4MHZ)

      2. Addressing range of 64k bytes

   B. Program Memory

      1. 12k bytes ROM (Level II Basic)

      2. 16k bytes RAM

   C. Graphics Memory

      1. 16k x 6 RAM (4116 Type)

      2. 1k bytes RAM (Standard TRS-80™ characters and graphics)

   D. Display

      1. Ultra high resolution color graphics

         a. Pixel densities of 384 x 192 in 8 colors utilizing RGB monitor and color mapping.

      2. High resolution TRS-80™ compatible color graphics

         a. Pixel densities of 128 x 192 in 8 colors; RGB output; composite color video (NTSC) output.

      3. Ultra high resolution B/W graphics

         a. Pixel densities of 480 x 192, mixed with standard TRS-80™ characters and graphics. This mode allows software driver programs which can display 80 characters by 24 lines with standard 5 x 7 matrix.

      4. High resolution B/W graphics with 8 levels of gray scale. This mode is also compatible with standard TRS-80™ graphics and text.

      5. Standard TRS-80™ character set and graphics (128 x 48).

      6. Upper and lower case character set.

      7. Reverse video.

      8. RGB, composite video B/W, composite video color (NTSC), RF output B/W and color.

   E. Cassette

      1. Standard TRS-80™ cassette interface

   F. Power Supply

      1. Powers both the computer and the system expansion board.

      2. Overvoltage protection

      3. Short circuit protection

      4. Thermal shutdown

      5. Four (4) supplies:

         a. +12V @ 1.5 A
         b. -12V @ 20.0 mA
         c. + 5V @ 4 A
         d. - 5V @ 1 mA

   G. Expansion Bus

      1. 40 pin TRS-80™ bus compatible with the LNW System Expansion Board and all other TRS-80™ compatible peripheral.

II. SOFTWARE

   A. 100% software compatible with any software generated for the Radio Shack's TRS-80™ Model I, Level II computer.