THE MFE APPROACH

MFE has a vested interest in thermal array technology. Being a world leader in oscillography, MFE is continually exposed to the ever-changing requirements of its diverse customer base, and must be responsive in order to maintain and expand its position. We have developed a unique, modular approach that enables the OEM user of recorders to avail themselves of those portions of the technology they require.

First, the most basic module is simply the recorder body with the paper drive motor and the thermal array head. No electronics are provided and the OEM provides all interfacing and controls. This option is ideal for the high volume user with the resources for both hardware and software development.

Second, MFE can add "basic" electronics. These electronics control not only the paper transport motor, but also provide the voltage regulation and timing signals for the print head. The OEM need only provide an 8-bit parallel data signal along with the appropriate control signals indicating when data is ready, and the MFE electronics do the repetitive elements. This is an important advantage as the OEM system microprocessor is freed from supplying the timing signals for the head and drive motor.

The third approach is for MFE to supply all the control electronics. This approach combines the above electronics with an additional microprocessor circuit to perform the curve smoothing, motor control, grid generation, and so forth. MFE can work with the OEM to provide additional or customized software that will meet the needs and requirements of those companies that have limited resources in hardware-software design. MFE has the expertise to incorporate many interface options, including Centronics, RS-232-C, IEEE-488, as well as custom interfaces.