PRODUCT INFORMATION

Vol. 61

OSD IC for PAL VCRs Developed

On-chip VPS/PDC slicer included for the first time in the industry.

LC74775/M

Overview

Television broadcasts in Europe already include VPS (video program system) and PDC (program delivery control) signals added during the vertical blanking interval. These signals support functions such as automatic VCR record adjustment and station identification. Until now, a special-purpose IC has been required to receive these signals.

VPS is an automatic recording control service provided mainly by broadcasters in Germany. It operates by automatically recognizing the VPS data added in the 16-line vertical blanking interval and assures that the desired program is recorded correctly, even if the program is delayed, moved to an earlier time, or otherwise modified, or if the program is interrupted by another program such as a news special. The user simply enters the date, station, and starting time of the broadcast (actually, an identifying label) into the VCR.

PDC is another automatic recording control service that uses the BSDP (Broadcast Service Data Packet) format 2 teletext provided mainly in Europe. It provides essentially the same functions as VPS. The teletext signal system is included in the broadcast signal by adding it to the vertical blanking interval. It compares the information set in the VCR timer circuit (record timer settings) with the broadcast PDC data and switches the VCR to record mode when the data match.

These systems basically start recording when the signal broadcast from the TV station matches the information (record timer settings, including date, time, country, and station identifier) programmed by the user in the VCR. VPS and PDC are services mainly designed to provide more accurate time management for timer-programmed VCR recording. In these systems the programs themselves control the recording processes even if the program schedule changes, with control based on the "label" (i.e. the VPS or PDC data) transmitted in addition to the program itself.

Sanyo has developed a new IC (the LC74775/M) that integrates the VPS/PDC data slicer functions with an earlier OSD (on-screen display) controller IC. This newly developed IC integrates OSD functions and VPS or PDC data slicing functions on a single chip for the first time in the industry by sharing the synchronization system circuit.

PRODUCT INFORMATION

Features

- Text structure: Display of 24 characters × 12 lines (up to 288 characters)
- Character structure: 12 dots × 18 dots
- Characters: 128 characters, each of which can be displayed in 3 sizes
- The display start position can be set to one of 64 positions horizontally and one of 64 positions vertically.
- Character blinking can be specified on a per character basis with a frequency of 0.5 or 1.0 seconds.
- Background color and line background color, using internal synchronization, can be specified to be one of eight colors: cyan, yellow, red, blue, cyan-blue, green, orange, or magenta.
- Sync separator and data slicer circuits are built in.
- The video output is a PAL format composite video signal.
- External control consists of a 3-wire system for OSD control and an I²C bus for VPS/PDC control.

Specifications

Supply voltage: 5 V
Packages: LC74775   DIP-30SD
                     LC74775M   MFP-30S

Sample Availability

Samples of the LC74775/M are available in May 1998; production quantities are anticipated in August 1998.

APRIL 22, 1998