

## DATA SHEET

# NEC

## BIPOLAR ANALOG INTEGRATED CIRCUIT

# $\mu$ PC1884

### SYNC SIGNAL PROCESSOR FOR MULTI-SYNC DISPLAY

The  $\mu$ PC1884 is a sync signal processor for multi-sync displays.

It integrates the functions necessary for the vertical/horizontal sync signals processing of a multi-sync display on a single chip. Because all functions can be handled by I<sup>2</sup>C bus, it is easy to interface with a CPU.

In addition to the basic sync signal processing, many functions, such as a H&V Dynamic Focus, multiple geometry correction circuits, and D/A converters for each control, are provided, making it easy to design applications.

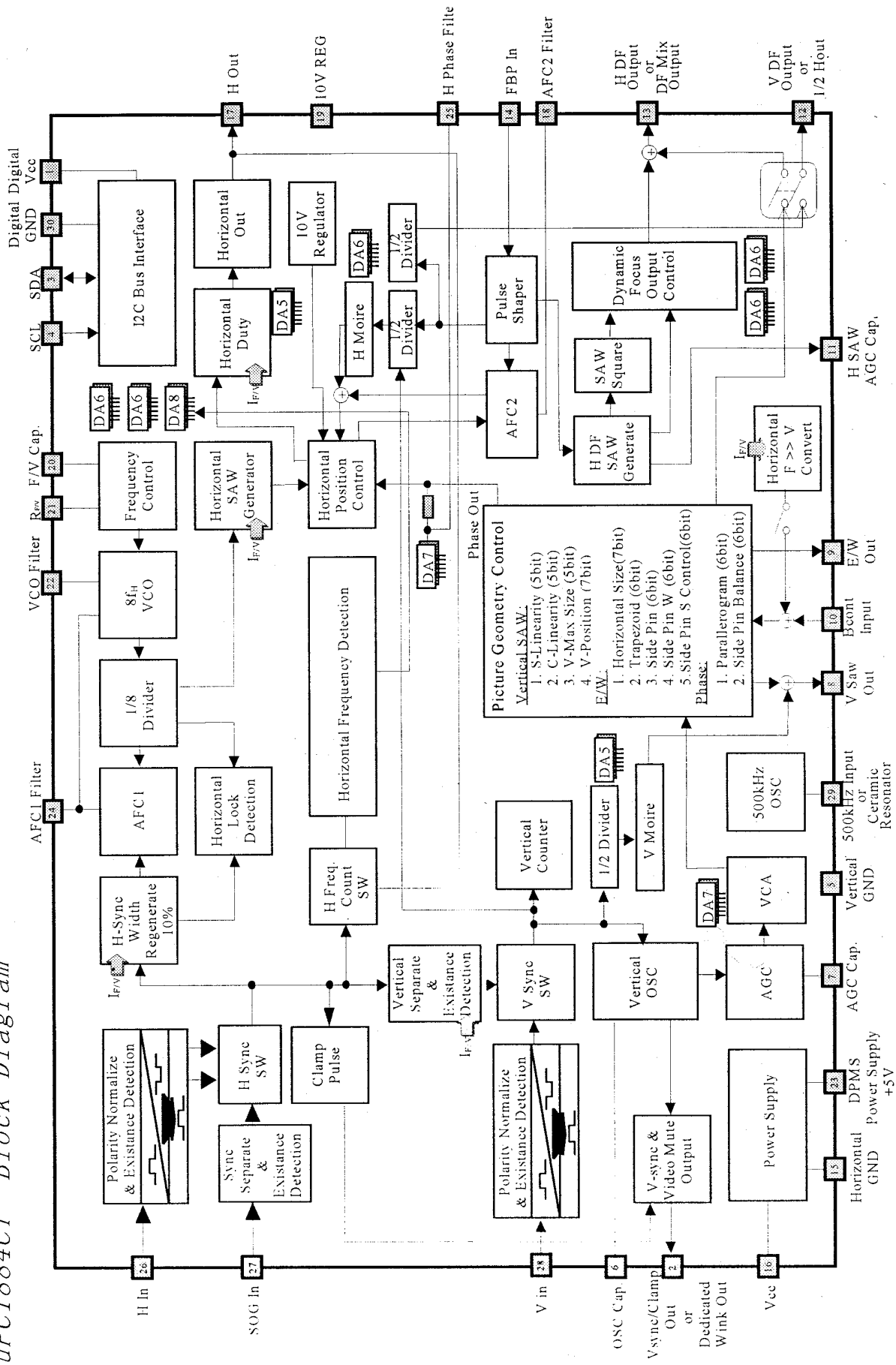
#### FEATURES

- I<sup>2</sup>C bus control : All functions are controlled by I<sup>2</sup>C bus.
- Geometry correction function : Geometry correction circuits are integrated on a single chip for V-S Linearity, V-C Linearity, trapezoid, Side-pin, side-pin W, side-pin S, parallelogram and side-pin balance.
- D/A converters : 20 D/A converter channels are provided to adjust each correction variable.
- Vertical linearity correction : Vertical S/C-shaped correction circuits are provided.
- Horizontal Dynamic Focus : Amplitude, Phase can be controlled. Dependent for Horizontal size.
- Vertical Dynamic Focus : Dependent for vertical size.
- Horizontal Moire Cancellor : Cancel amount can be controlled.
- Sync separation circuit : Green On Sync signal can be input with coupling capacitor.
- Vertical AGC circuit
- Size control circuit : Vertical/horizontal screen size can be controlled.
- Position control circuit : Vertical/horizontal screen position can be controlled.
- Polarity normalization circuit : Both positive and negative polarities can be input for both vertical and horizontal sync signals.
- Vertical blanking generation circuit and video clamp generation circuit : Sand castle output
- Horizontal output duty adjustable
- Horizontal Lock detection circuit
- Power management supported

#### ORDERING INFORMATION

| Part Number    | Package                             |
|----------------|-------------------------------------|
| $\mu$ PC1884CT | 30-pin plastic shrink DIP (400 mil) |

# uPC1884CT Block Diagram



# PIN CONFIGURATION (Top View)

30PIN · PLASTIC · SHRINK · DIP (400mil)

