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## Multi Video Input Interlace / Progressive Conversion IC

### ■ DESCRIPTION

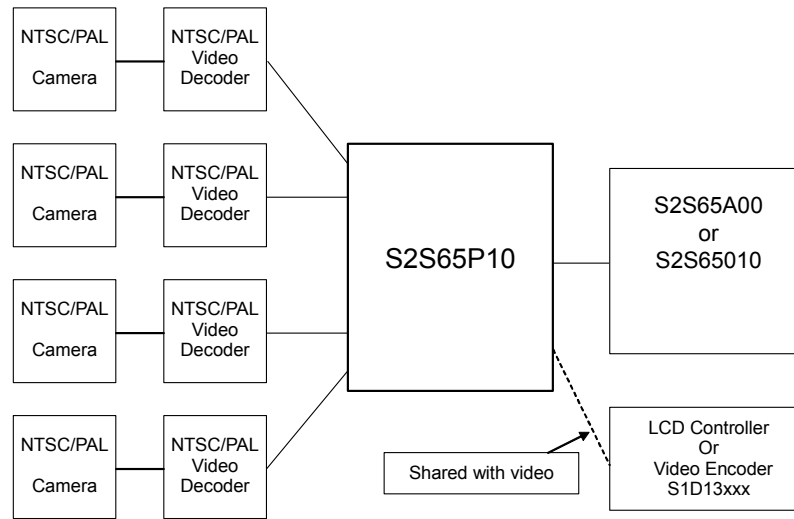
S2S65P10 is an IC which converts the interlace signals into the progressive signals. Combining S2S65P10 with the image controller IC (S2S65A00) or the network camera controller IC (S1S65010) makes it possible to convert the digital signals sent from the NTSC/PAL video decoder into the JPEG format. S2S65P10 has a large-capacity SRAM built in, so it requires no external RAM. S2S65P10 has four channels of video input, and provides versatile screen outputs, including fixed, auto-scan, and 4-input-merge screen outputs. It has also the moving-object detection function built in. It interrupts the host CPU upon detecting a moving object, so it saves power consumption of the system.

### ■ FEATURES

- Video input
  - 4 ch. for input, out of which 1 ch. is shared with video output.
  - 8-bit input mode
  - Complies with ITU-R BT.601 (4:2:2) / ITU-R BT.656
  - Compatible with NTSC/PAL
  - Compatible with interlace input/progressive input
- Video output
  - 2 ch. for input, out of which 1 ch. is shared with video input.
  - 8-bit output mode
  - Complies with ITU-R BT.601 (4:2:2) / ITU-R BT.656
  - Compatible with progressive output
  - 30fps@VGA
  - 4 - 1 Intelligent Image Switch function
  - Compatible with 4-inputs-merged screen (QVGA x 4 = VGA)
- Host interface
  - I<sup>2</sup>C interface
  - Interrupt by detecting moving object
- Image Processing
  - Interlace/Progressive Conversion
  - Conversion of aspect ratio
  - Area sensor (for moving object detection)
- Camera control output/GPIO
- No external RAM required
- Guaranteed operating temperature: -40 - +100 °C
- Source Voltages: 1.8 V (core), 2.4 – 3.6 V (I/O)
- Package: QFP15-100pin (14 x 14 x 1.4 mm, 0.5 mm pin pitch)

# S2S65P10

## ■ BLOCK DIAGRAM



## ■ COMBINING AS A CHIPSET WITH IMAGE CONTROLLER IC (S2S65A00) THAT SUPPORT DUAL CAMERA, AND WITH NETWORK CAMERA CONTROLLER IC (S1C65010)

S2S65P10, combining as a chipset with the image controller IC (S2S65A00) that supports dual camera, can connect with eight camera sets (each consisting of camera module + NTSC/PAL decoder) at the maximum. S2S65P10 can also connect with four camera sets (module + NTSC/PAL decoder) at the maximum by combining as a chipset with the network camera controller IC (S1S65010).

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