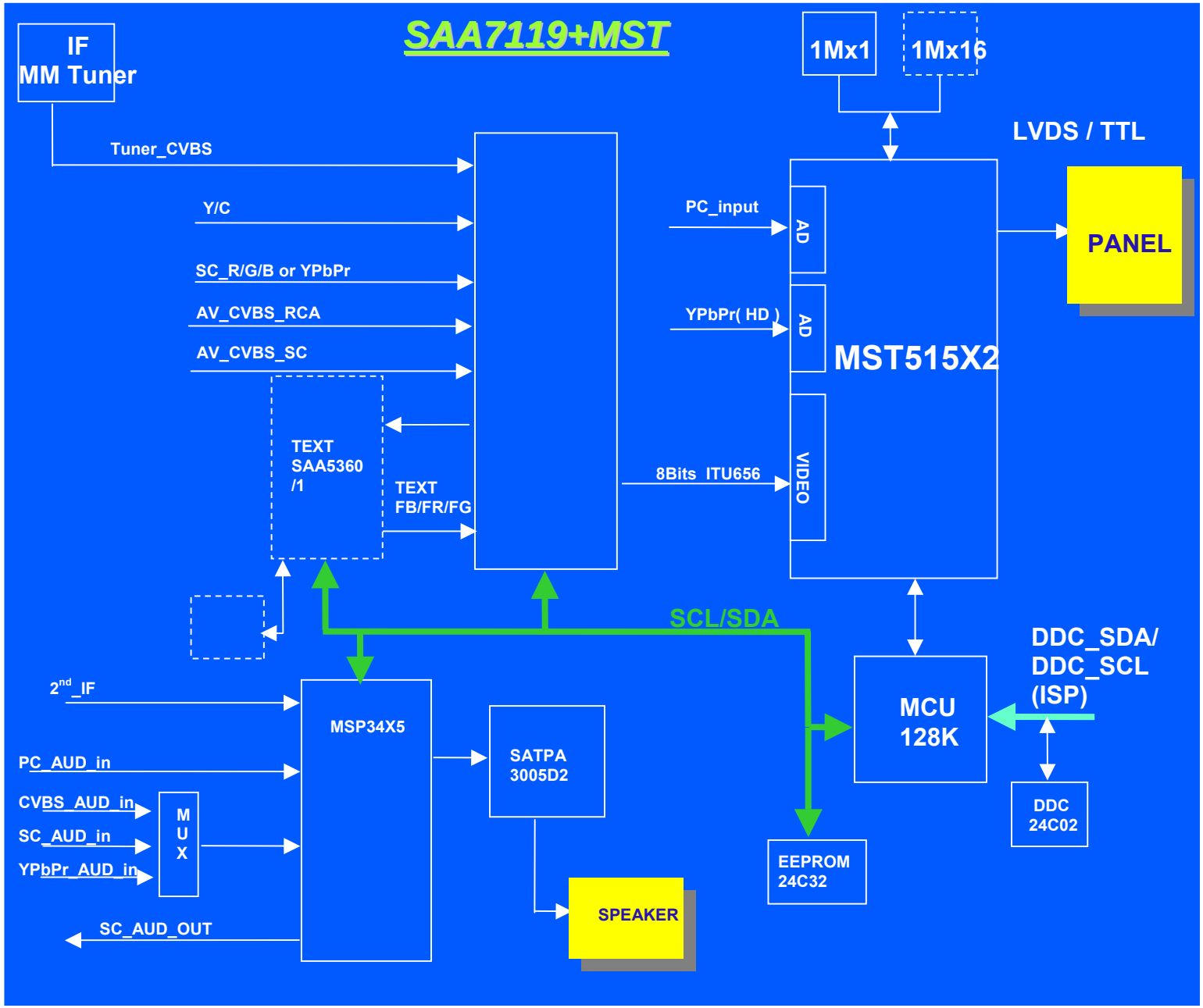
Exhibit 5

System block diagram



Brief Description of Circuit Functions

1. General Description

This LCD-TV-F1 support PC analog input up to 800X600 60Hz mode for SVGA panel, and support TV (RF), YC, CVBS, and SCART. Also for Y Pb Pr signal input from SDTV to HDTV (480I, 480P, 720P, 1080i 60Hz and 576I, 576P, 720P, 1080I 50Hz).

This LCD - TV use MST51502 as Scaler engine, which has embedded Analog D-sub, digital DVI decoder, scaling input signal to panel OSD mapping and simple 3D de-interlacer. The extra SDRAM is to accomplish video frame rate conversion and PIP function.

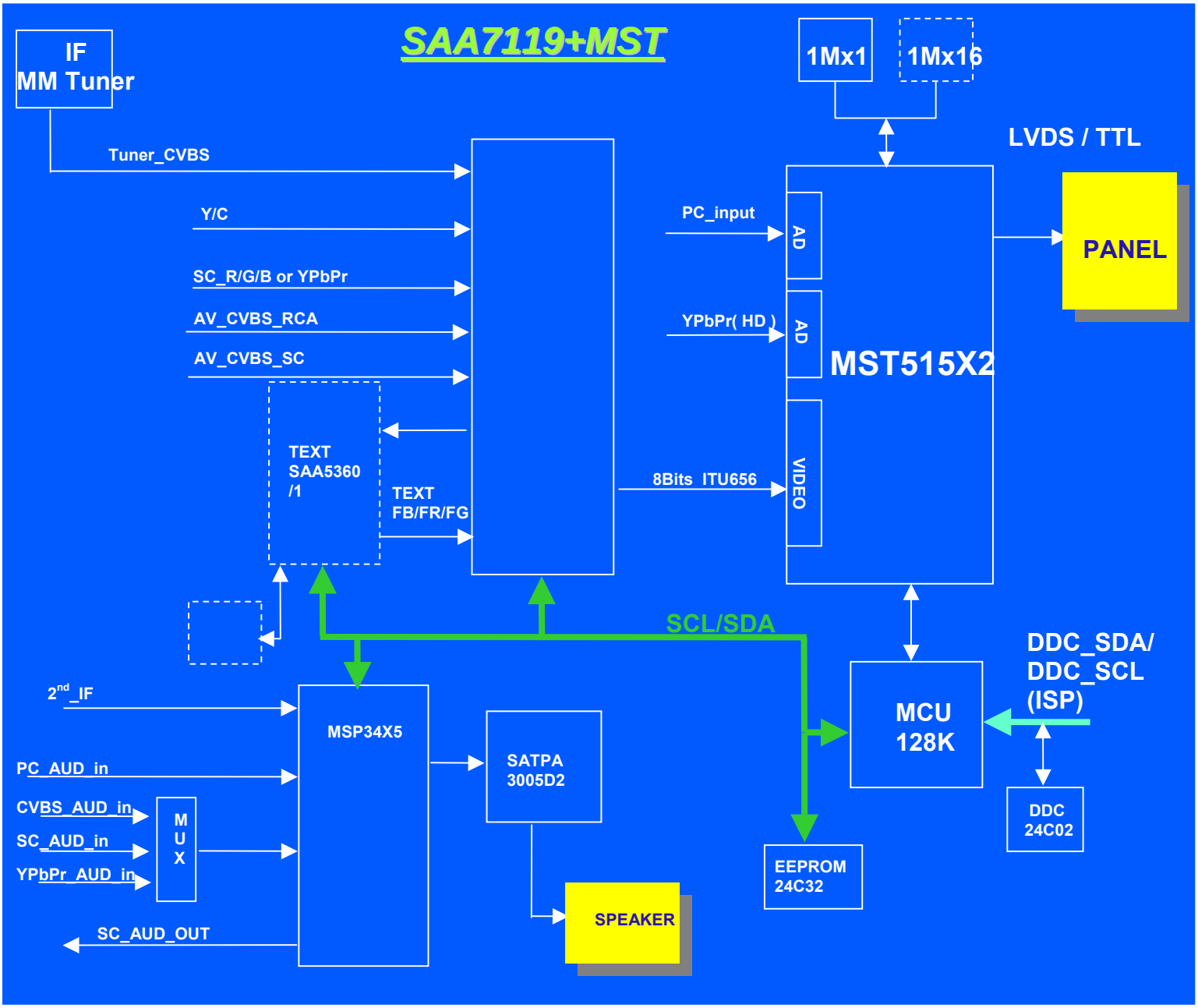
The external CPU can be used to back light control, RC, keypad input, IIC I/O communication and. TV tuning control, sound control, and SAA7119A video decoder.

Video decoder SAA7119 is used for TV video processing and convert it with CCIR 601/16bits or 656/8bits digital format and send to Scaler for de-interlace process, and also CC,V-chip data decode.

One audio decoder MSP34XXG is used for TV sound processing, and output to post amplifier and SCART out.

An option function in WE model “Telttext display”. Data decode is done by SAA5360, output RGB/FB is to video decoder input for text overlapping. In non-text model, this chip is N.C.

2. System block diagram



Scaler choice:

If the panel interface is TTL type: 20” use **MST51502L**.

If the panel interface is LVDS type: 14”15”17” use **MST51512L**

3. Function description:

MM tuner is used to receive RF wave and output CVBS and 2nd IF signal. CVBS is to video decoder
(SAA7119) for color process, 2nd IF is to sound decoder (MSP34x5) for audio process. The tuner control is via IIC ex. channel tuning. For different TV system, tuner and sound decoder have diversity as above.

Standard TV input (Tuner, S-video, CVBS, SCART) is processed by SAA7119, But YPbPr, SDTV and HDTV(480i, 576i, 480p,576p,720p,1080i), is done by scaler MST51512L/502L ADC. But the signal is still link to SAA7119 if PIP (video in graph) function is requested. Then all YPbPr signal processed by SAA7119 could be the PIP video source. (* May use down sampling in HD0)
MV protect is decoded by scaler.

Video decoder SAA7119, is in charge of color decoding, could support PAL, NTSC and SECAM world wide
system. Compare to SAA7118, SAA7119 improve some picture quality, like V-chip CC I2C read-back, LTI, CTI, skin tone correction(see task A), also the HD0 is supported, so if F1 need PIP function then the The

Teltext function is for WE model, need a extra IC SAA5360. CVBS input, R/G/B, FB, out. Due to the SAA5360 request input signal 1Vrms and only one input channel, so the CVBS input source is from SAA7119 AOUT (CVBS out with 1Vrms). The R/G/B FB output into SAA7119 by AI22/AI32/AI42, and AI44 could overlay on any video source.

Sound decoder MSP3415/45 is responsible to sound decode of tuner 2nd IF. It has one 2nd IF, two selectable audio sources input. And one loudspeaker, one scart out. Due to the input port limitation, a MUX is added for AV source select(PC audio in is fix in SC1). If the post audio amplifier is gain fixed type then the volume adjust will be on MSP34x5.

Scaler MST51502L/51512L besides scaling function, PIP, 3D de-interlacer, color enhance are major feature.
Even de-interlacer is not so good but for static picture is enough to avoid image sticking.

In America market, to avoid patent issue, two SDRAM is necessary for graph frame buffer. But in else region one SDRAM is enough. Of course, if no PC mode in spec, then one SDRAM for all model.

The scaler structure limitation, the PIP source only from “video port”, 8 bits or 16 bits. The sub window /PIP size can enlarge to half screen.

MCU, NT68F632AL, is 128K flash ROM inside. Power control, RC5 I/O, and key function all done by here, more detail function will description in chapter 4.later.

All chip communication is by IIC (SDA/SCL), and ISP is via DDCIIC, but if PC mode un-supported, then a reserved 6pin connector is for same application.