



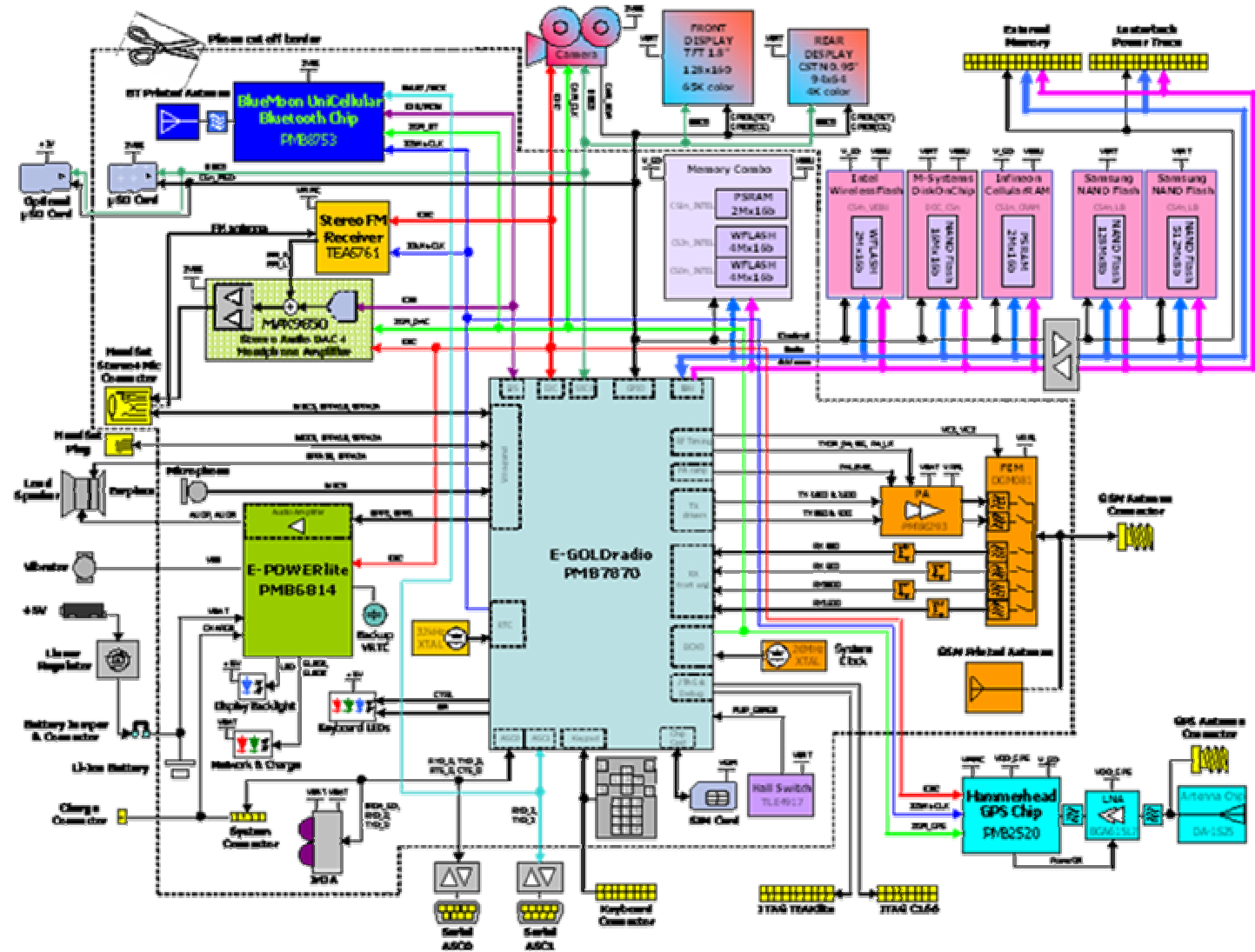
GLOBEx-BB-SW-Interface

Author: Gabriele Capello

February 2006

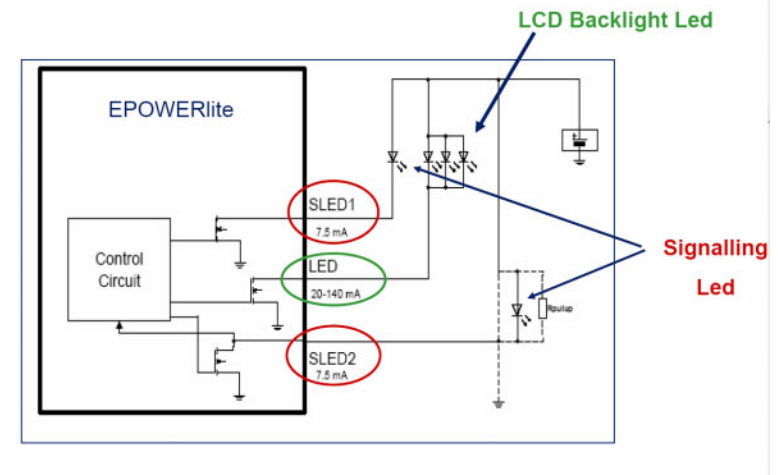
Based on GLOBEx-BB-SW-Interface-TS.doc

Detailed BP30 GLOBE6 block diagram

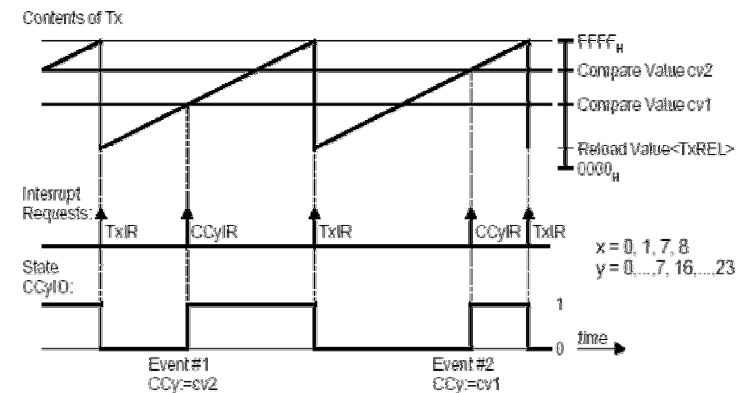


LED control

- Using EPOWERLite →



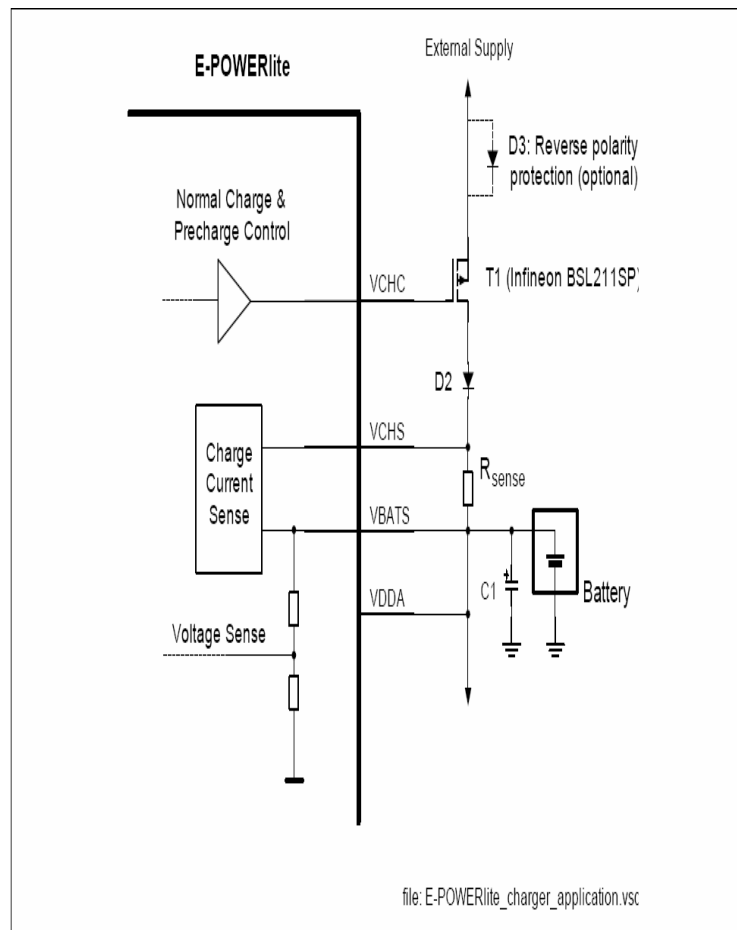
- Using PWM outputs of EGOLDLite for multicolor LEDs (PWM waveforms)→



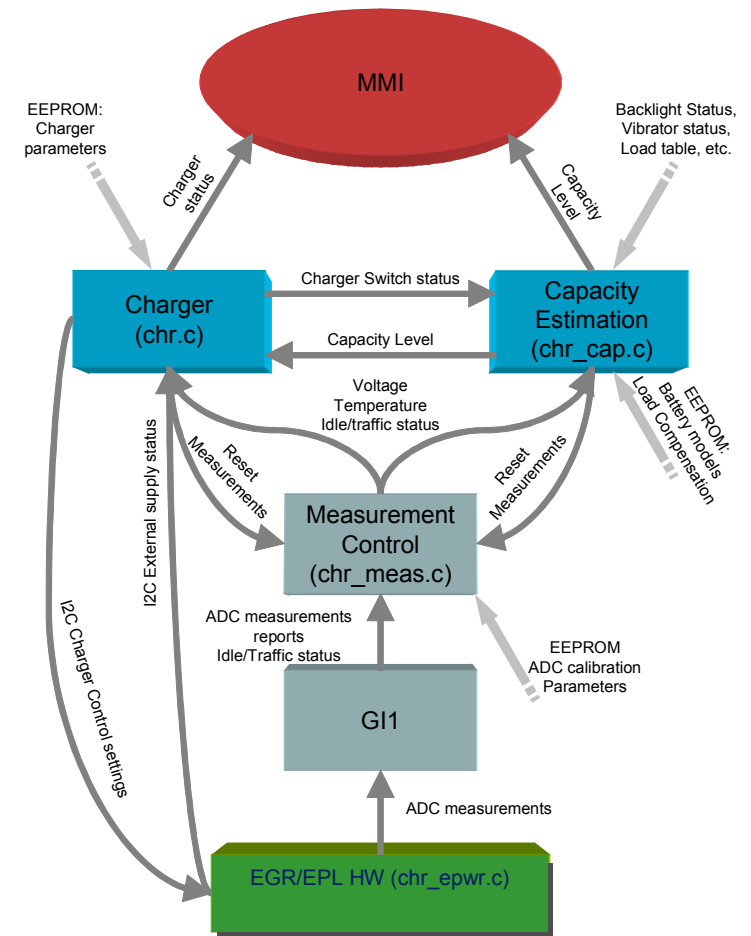
Battery: Charging

Circuit

(see EPOWERLite datasheet)



Algorithm

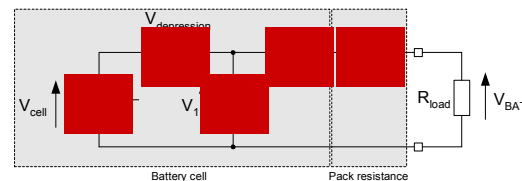


Battery: Estimate capacity

Capacity model parameters

State machine diagram

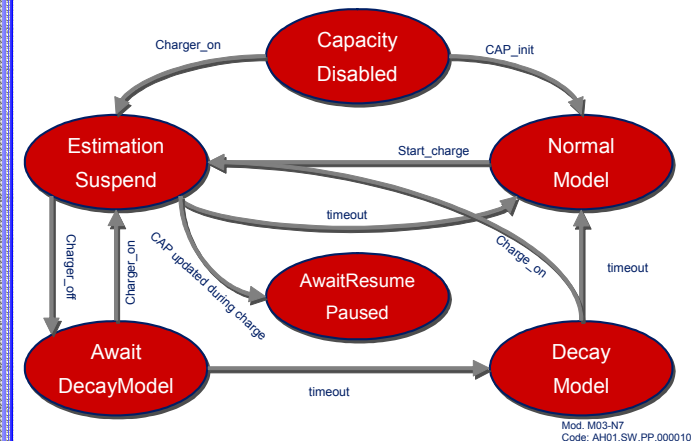
GLOBEx – SW driver: Battery Model and Capacity Estimation



- Battery voltage: $V_{cell} = f(c)$
- Electrolyte/Separator Resistance $R1 = f(T)$
- Electrode/Internal conn Resistance $R2 = f(T)$
- Additionl Resistance (wiring, protection circuit) $R3 = f(T)$
- Resistance for SLOW load changes $R_{dc} = R1 + R2 + R3$
- Resistance for FAST load changes $R_{ac} = R2 + R3$
- Internal Capacity $C = k$

Mod. M03-N7
Code: AH01.SW.PP.000010

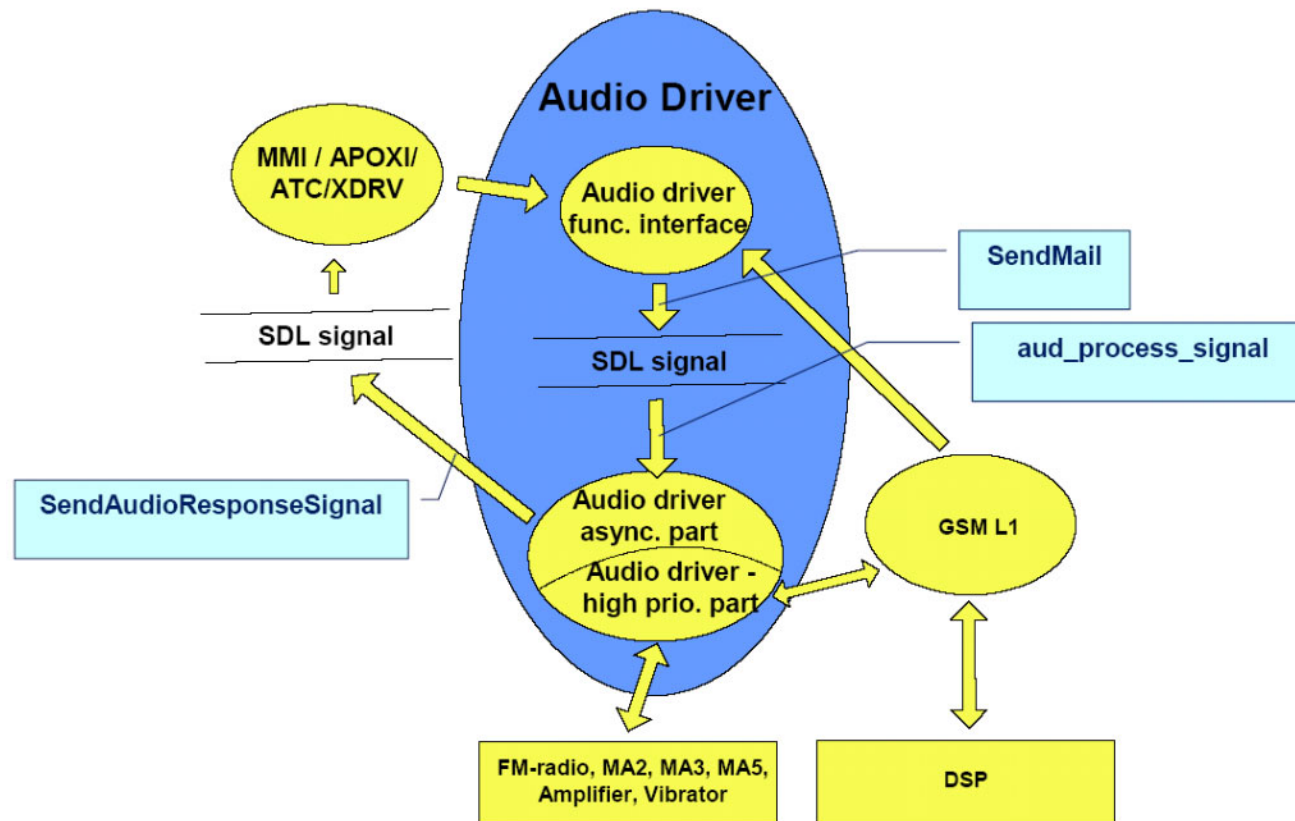
Capacity State Diagram



Mod. M03-N7
Code: AH01.SW.PP.000010

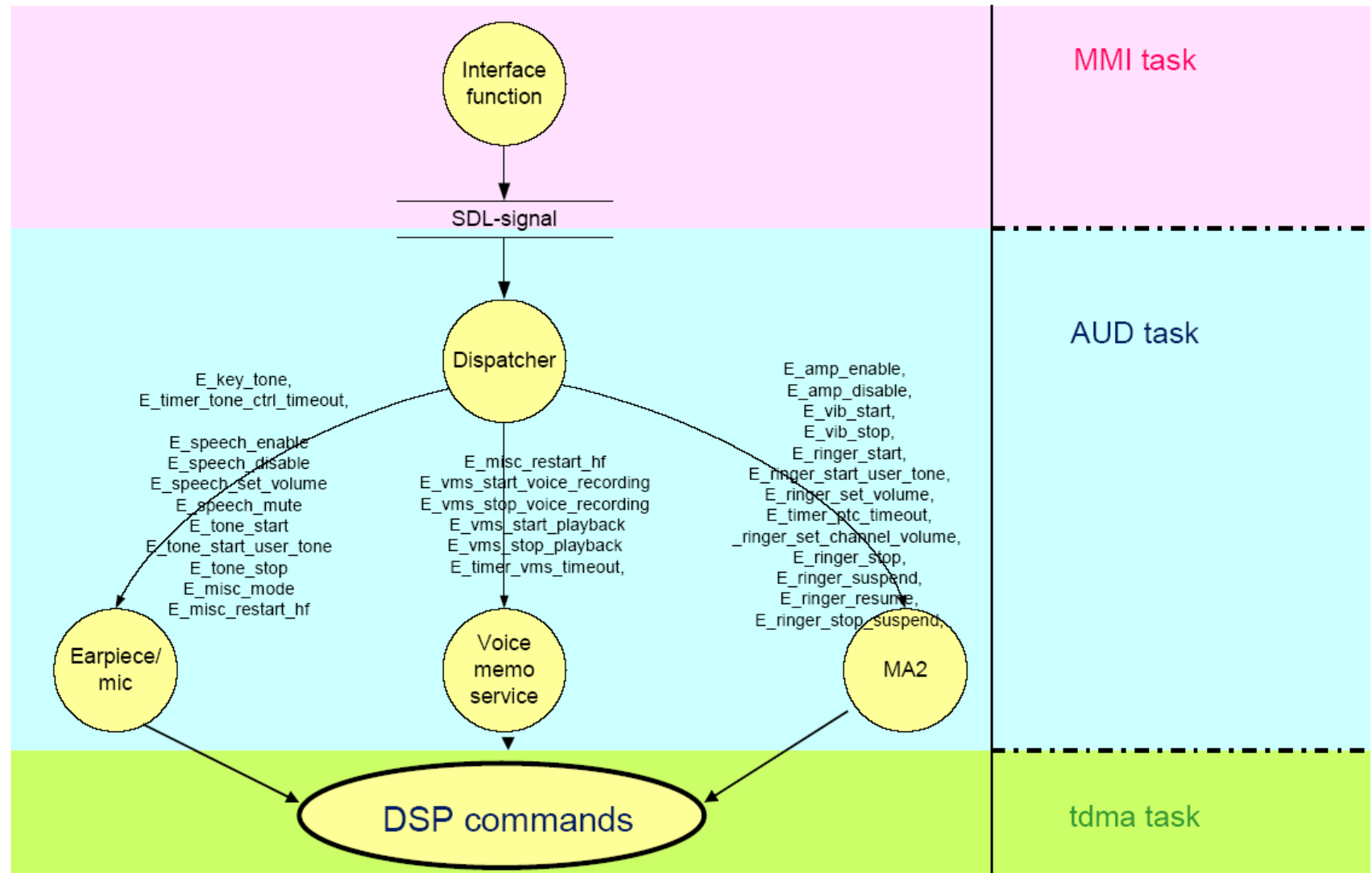
Audio

Audio driver architecture



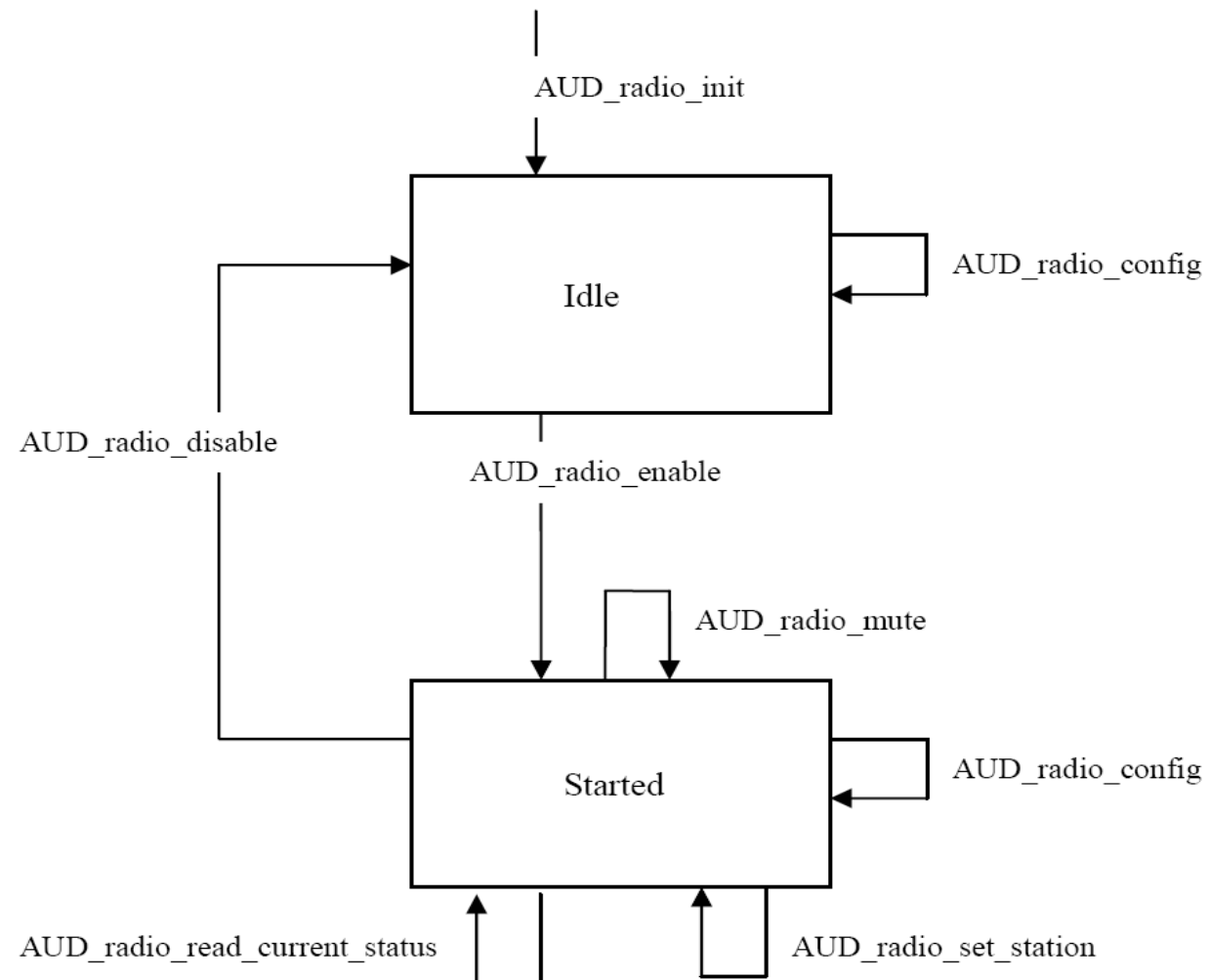
Audio

Audio driver overview



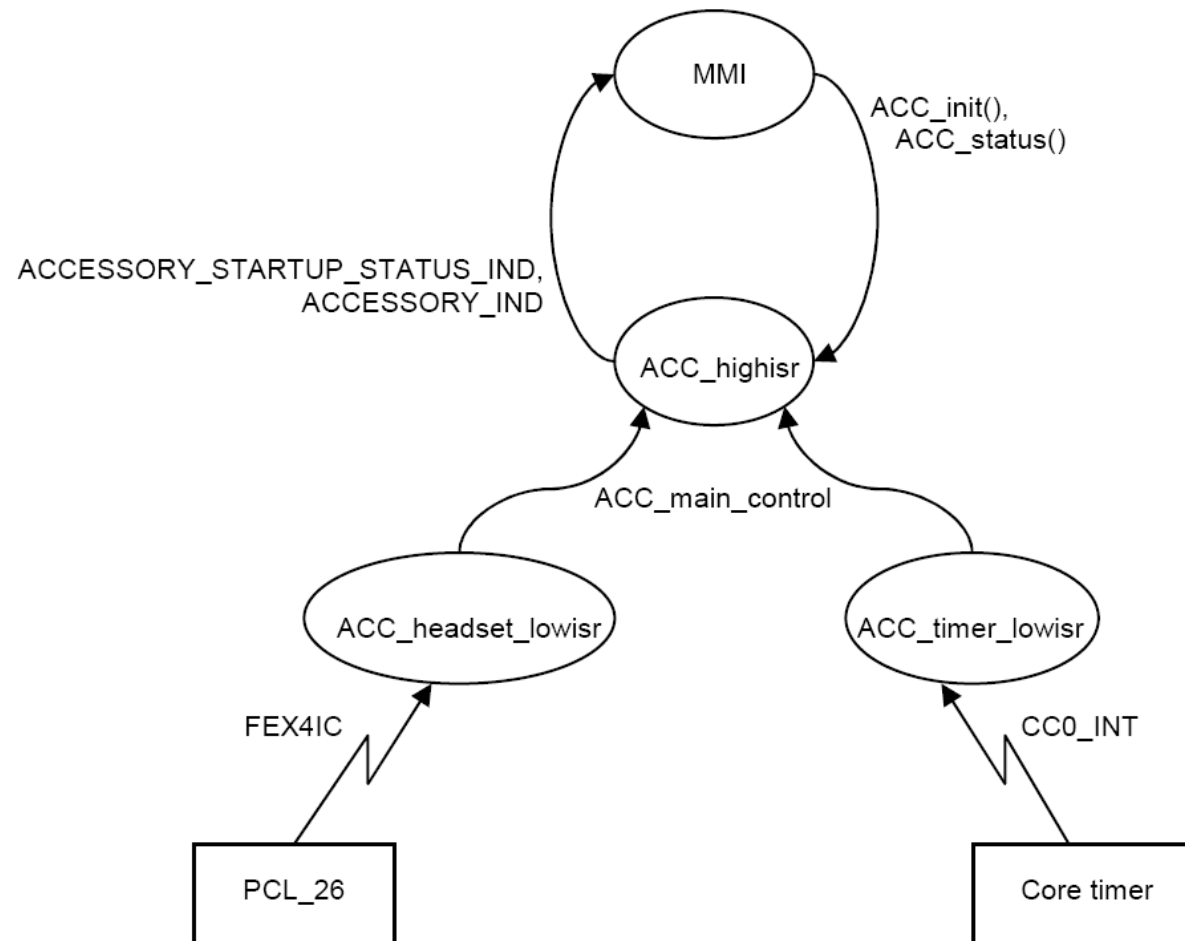
FM-radio

FM radio state machine



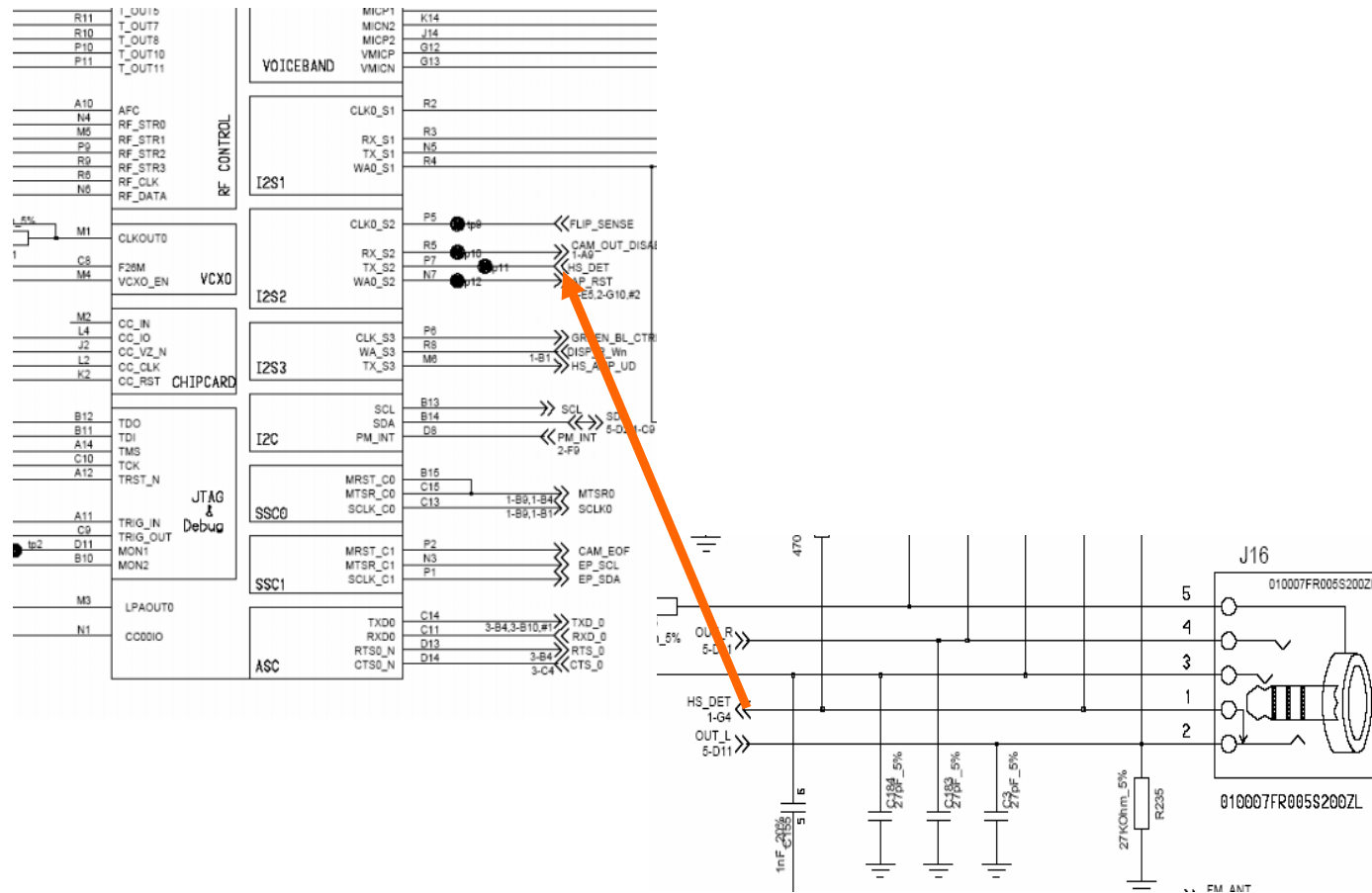
Baseband

Accessory driver architecture



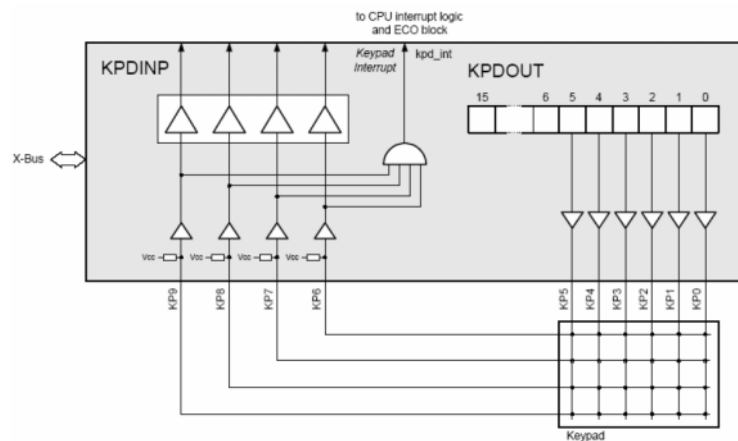
Baseband

Headset detection line

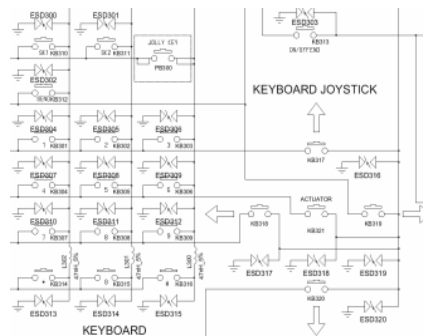


Baseband

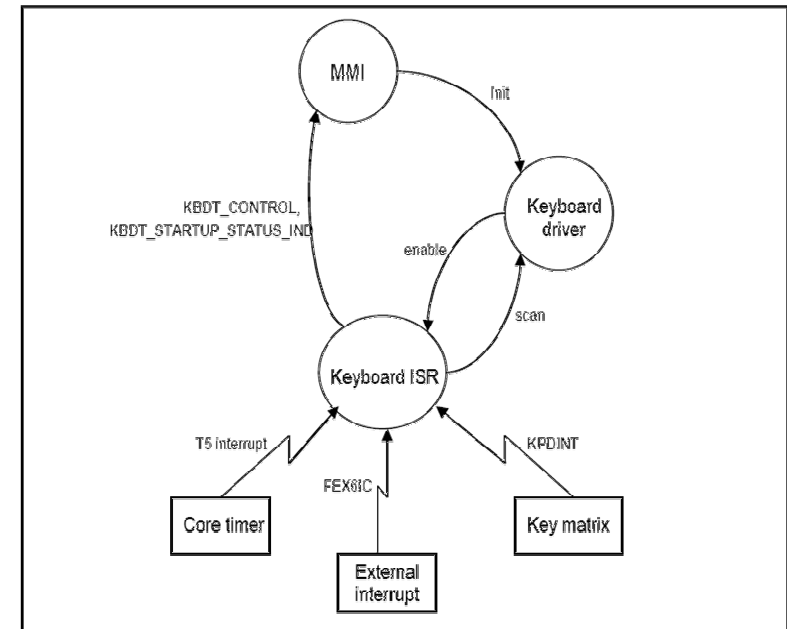
Keypad interface for E-GOLDRadio



Key mapping

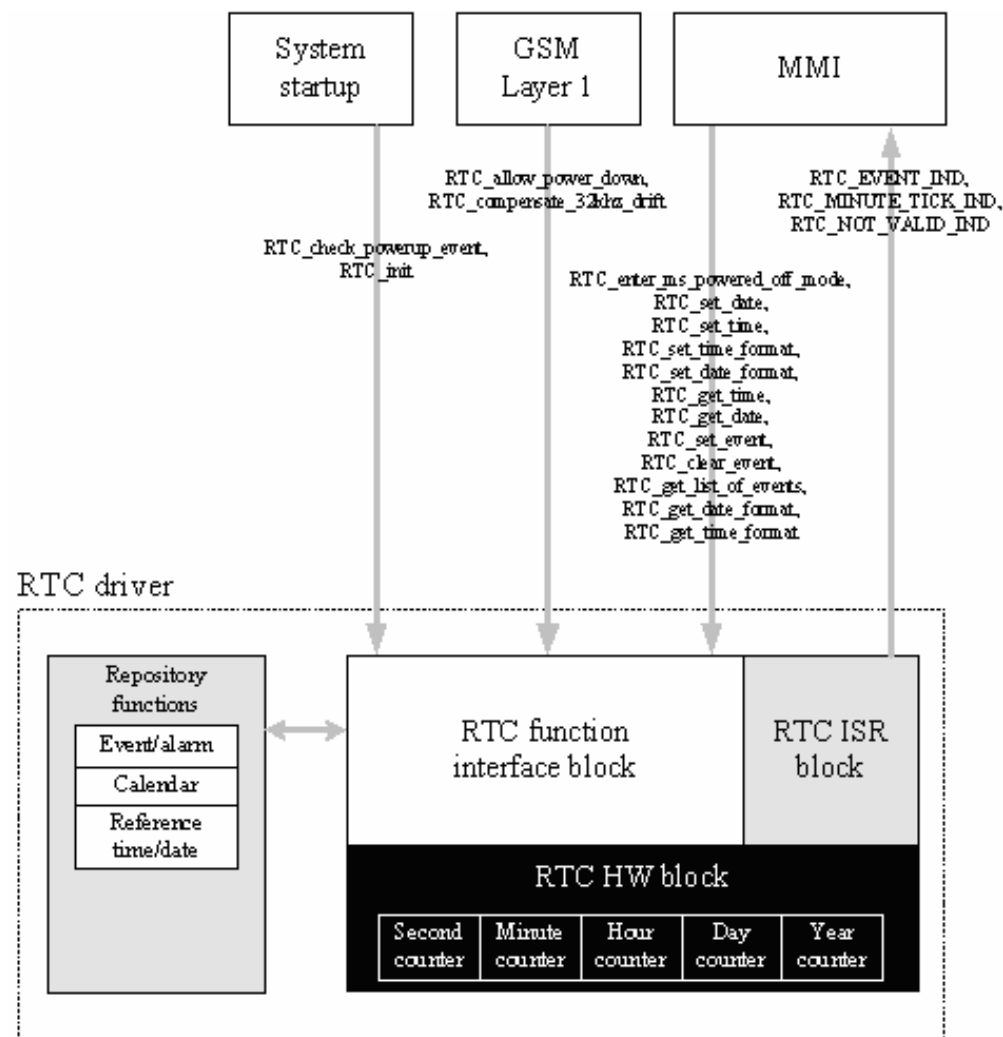


Keyboard driver architecture



Baseband

RTC driver architecture



The logo for NEON SEVEN is displayed vertically. It features a red stylized flame or drop icon at the top, followed by the word "NEON" in red and "SEVEN" in black, both in a bold, sans-serif font. A thin red vertical line runs through the middle of the text.

Thank you !