# FM RADIO DRIVER PRESENTATION

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# AGENDA

- BP30 Globe 6 Block Diagram
- Phone tool audio interface
- FM Radio Driver Overview
- FM Radio State Machine
- FM Radio Driver Files
- Interface Description
- Structure and Enum Used

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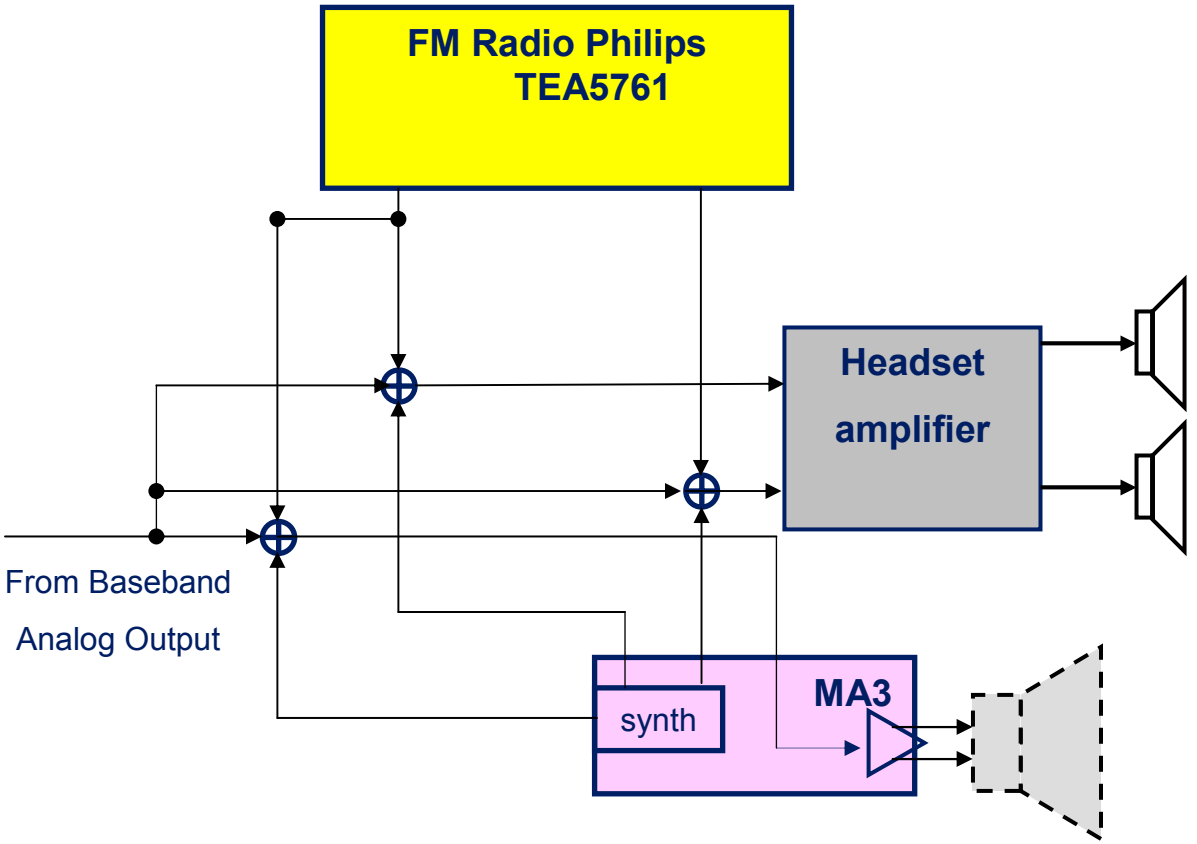
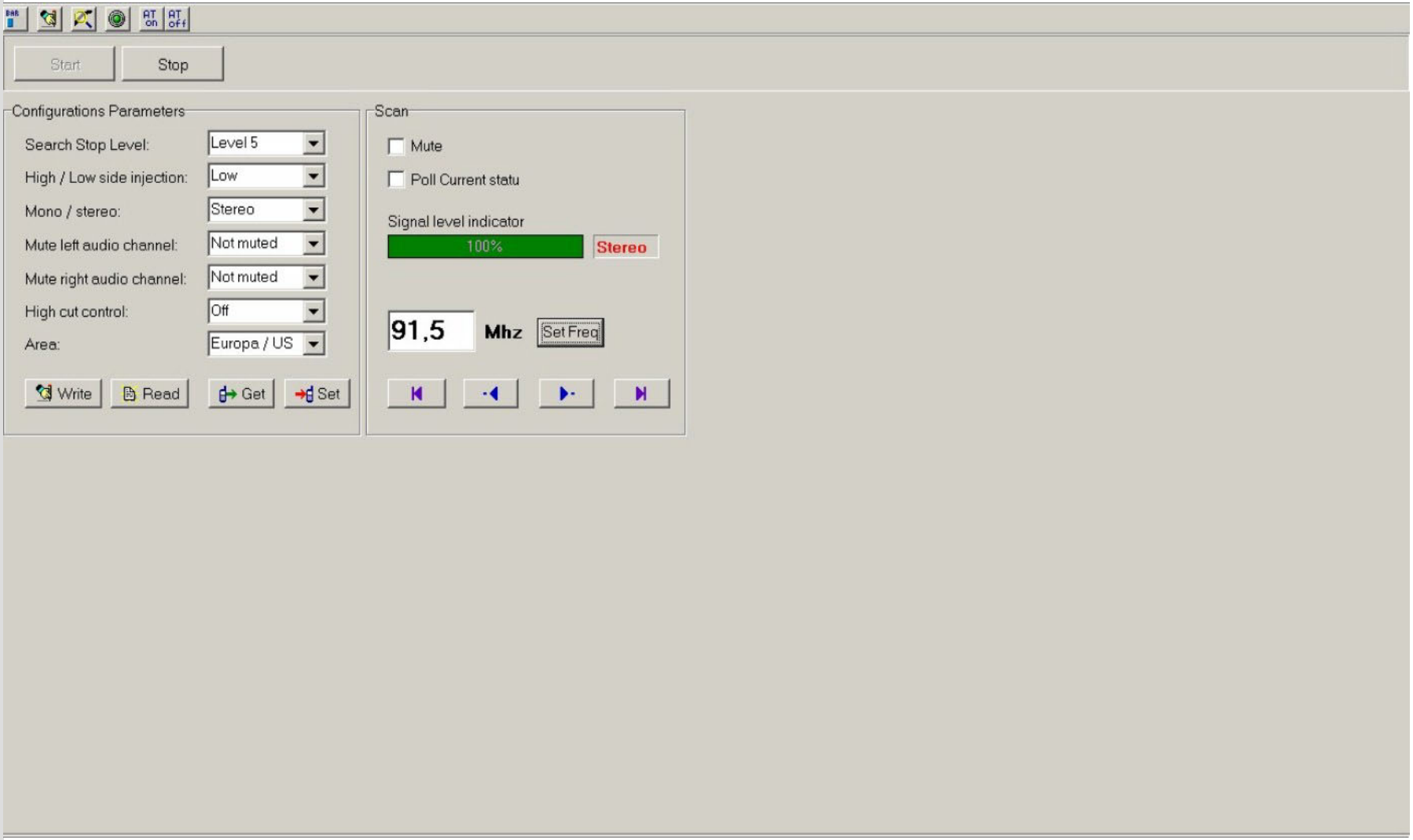
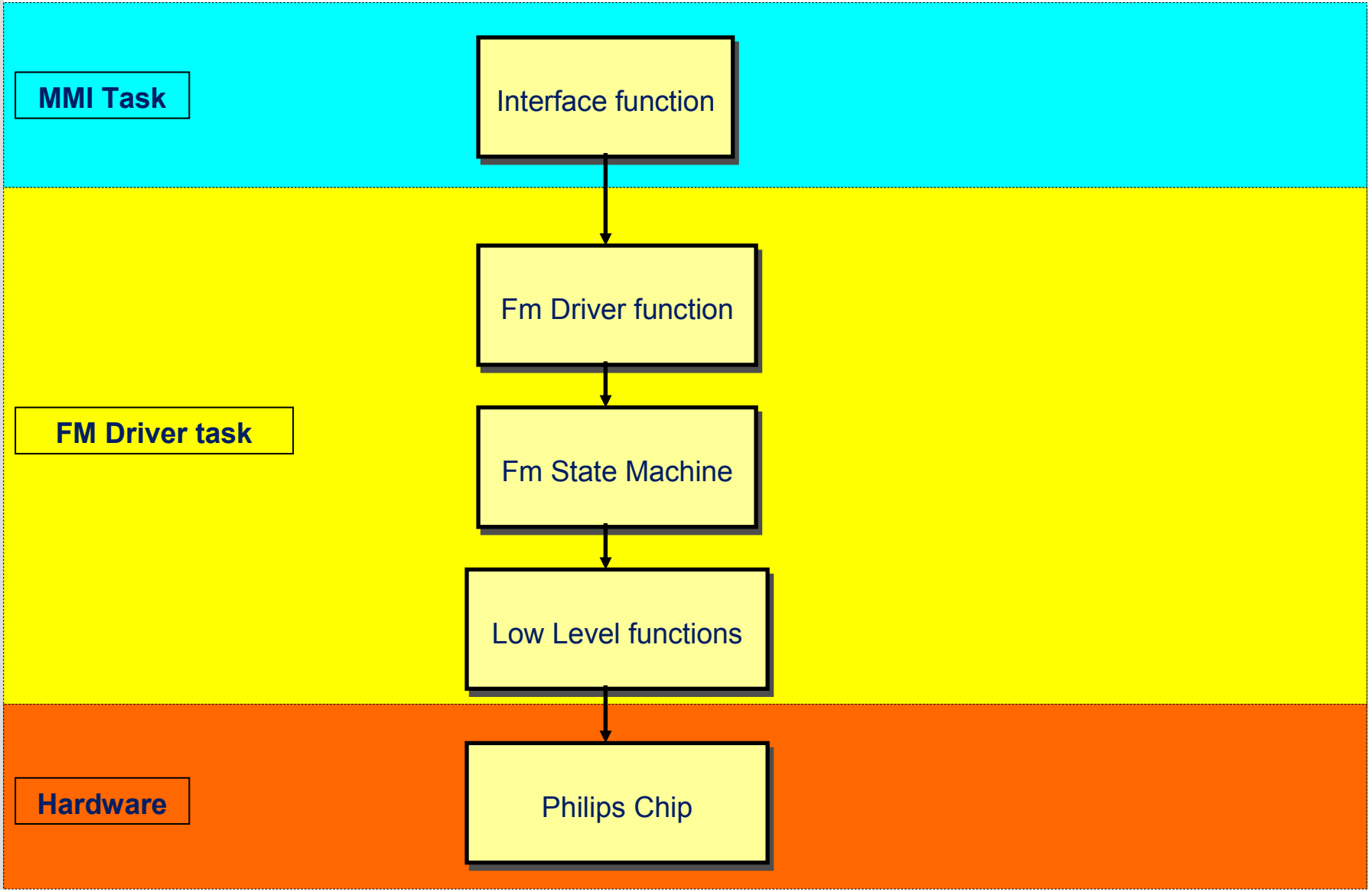
# BP30 Globe 6 Block Diagram



# Phone tool audio interface



# FM Radio Driver Overview



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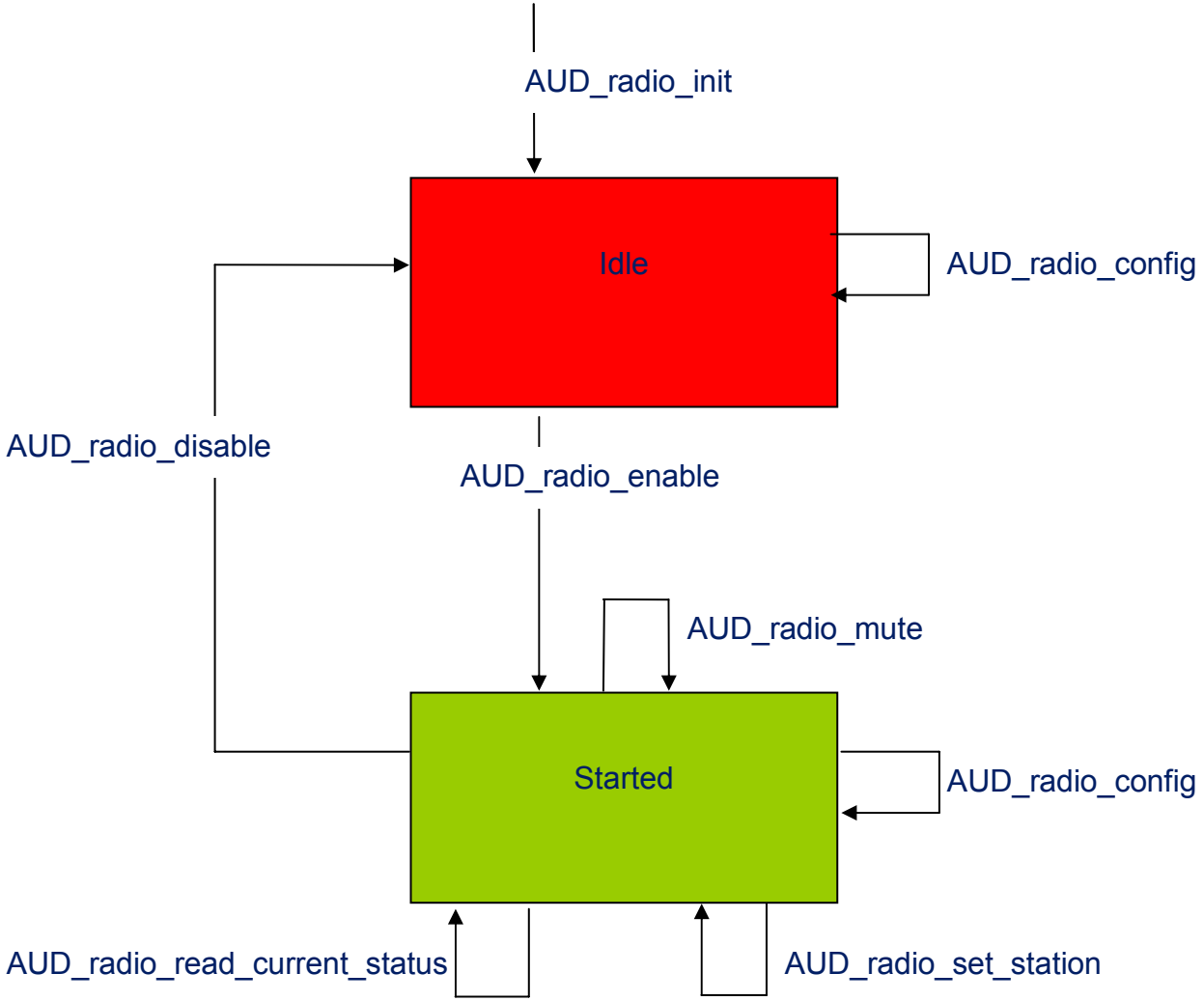
# FM Radio State Machine



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# FM Radio Driver Files

- Fm_radio_bp2.c - Interface, low level functions and State Machine
- I2c_driver.c - I2C function for FM Radio programming
- fm_radio_bp2.h - Header file

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# Interface Description

- ***MMI***
  - SINT8 AUD_radio_init (UINT8 handle)
  - SINT8 AUD_radio_config (UINT8 handle, AUD_radio_config_data_type* AUD_radio_config_data)
  - SINT8 AUD_radio_enable (UINT8 handle)
  - SINT8 AUD_radio_disable (UINT8 handle)
  - SINT8 AUD_radio_mute (UINT8 handle, UINT8 mute)
  - AUD_radio_set_station (UINT8 handle, AUD_radio_seek_mode_enum seekmode, UINT32 frequency)
  - SINT8 AUD_radio_read_current_status (UINT8 handle)
  - SINT8 AUD_radio_volume(UINT8 handle, aud_volume_enum volume)

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# Structure and Enum Used

- Struct: AUD_radio_config_data_type
  - SSL — Search Stop Level enum
  - HLSI — HIGH/LOW Side Injection
  - MS — Mono/Stereo
  - ML — Mute Left
  - MR — Mute Right
  - BL — Band Limits (Japan or US/Europe FM band)
  - HCC — High Cut Control
- Enum: AUD_radio_search_stop_level_enum
  - Not_allowed — not allowed in search mode
  - level_5 — low; level ADC output = 5
  - level_7 — mid; level ADC output = 7
  - level_10 — high; level ADC output = 10

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# Structure and Enum Used

- Enum: AUD_radio_seek_mode_enum
  - Off — Auto seek disabled
  - manualUp — Manual seek one frequency step up
  - manualDown — Manual seek one frequency step down
  - autoUp — Auto station seek up
  - autoDown — Auto station seek down

- Enum: AUD_radio_return_code
  - aud_rc_handle_not_used — Returned when calling AUD_radio_disable and radio not started
  - aud_rc_resource_in_use — Returned when calling AUD_radio_enable and radio not stopped
  - aud_rc_no_hw_support
  - aud_rc_ok — success