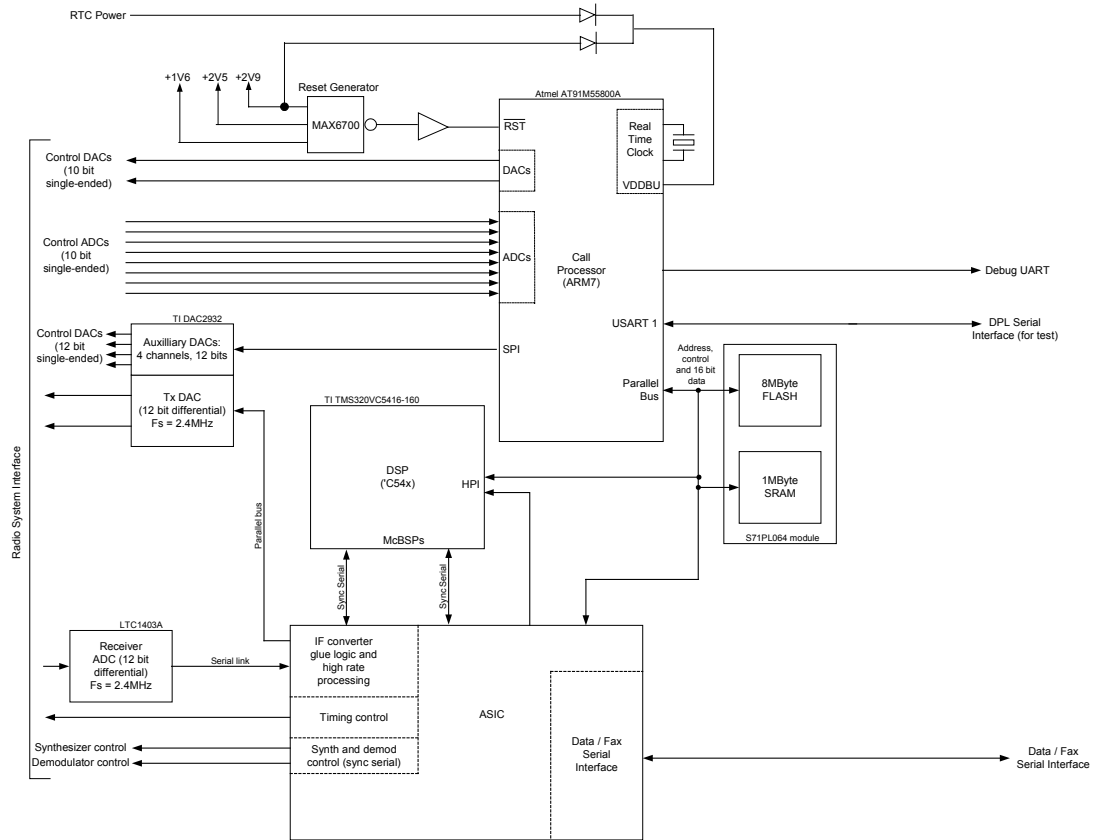**Cambridge Consultants**

Figure 3: Baseband and Digital Block Diagram

6.1 Call Processor

The call processor (CP), an Atmel AT91M55800A, is the master system processor. It has control of the frame timing: the DSP and all other devices operate as slaves to the CP. The CP device includes not only the processor core, but also the following components in the same part:

- 8k byte of static RAM,

- a power management controller and clock generator block,

- a real time clock (RTC),

- a watchdog timer,

- an interrupt controller,

- three asynchronous serial ports,

- a timer-counter block,

- an SPI interface,

- eight channels of ADC, and