ABSTRACT

A low cost, a low power consumption and a small size are three very important factors for a mobile communication terminal. A great problem is posed by the conventional technique using a DSP and a CPU independent of each other which requires two external memory systems. Also, two peripheral units are required for data input and output of the DSP and CPU. As a result, an extraneous communication overhead occurs between the DSP and the CPU. The invention realizes a mobile communication terminal system by a DSP/CPU integrated chip comprising a DSP/CPU core (500) integrated as a single bus master, an integrated external bus interface (606) and an integrated peripheral circuit interface. The memory systems and the peripheral circuits of the DSP and the CPU can thus be integrated to realize a mobile communication terminal system low in cost and power consumption and small in size.