

Abstract

SWITCHED SHARED MEMORY DATA PROCESSING SYSTEM

5 The present invention relates to efficient data processing within devices. For instance,
image and video processing within a mobile phone. In this and other cases the
processing can be split into a pipeline with data being fed in one end, processed by a
number of distinct stages, and output the other end. The data may travel in various
ways, for instance when processing an image, the data may appear one pixel at a
10 time, with each pixel taking a certain time, commonly known as a clock cycle.
Furthermore, when processing an image, the pixels could form a grid and a number
of consecutive pixels could constitute a row of that grid, with subsequent pixels forming
the row below and so on.

15 (Figure 1)