

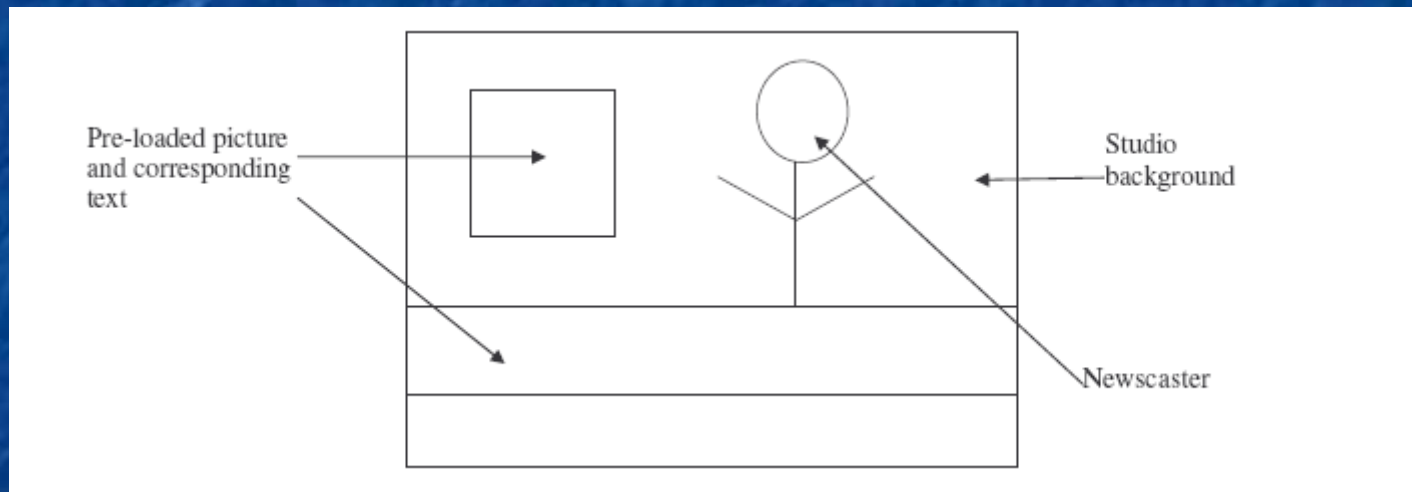
6.111 Newscasting

Obinna Anyanwu

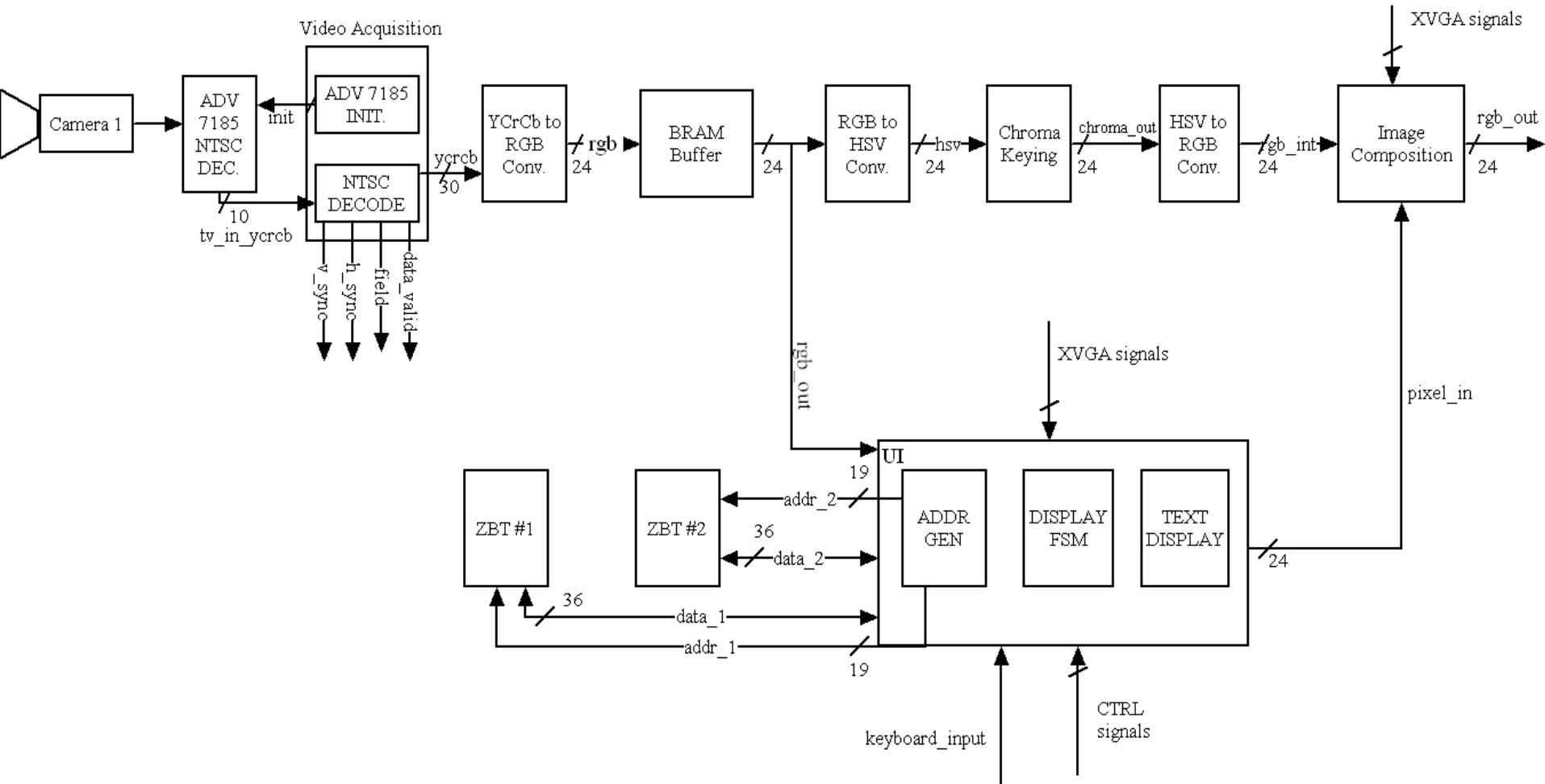
Jyotsna Venkataramanan

Overview

- Aim: To create a do-it-yourself newscast



Block diagram

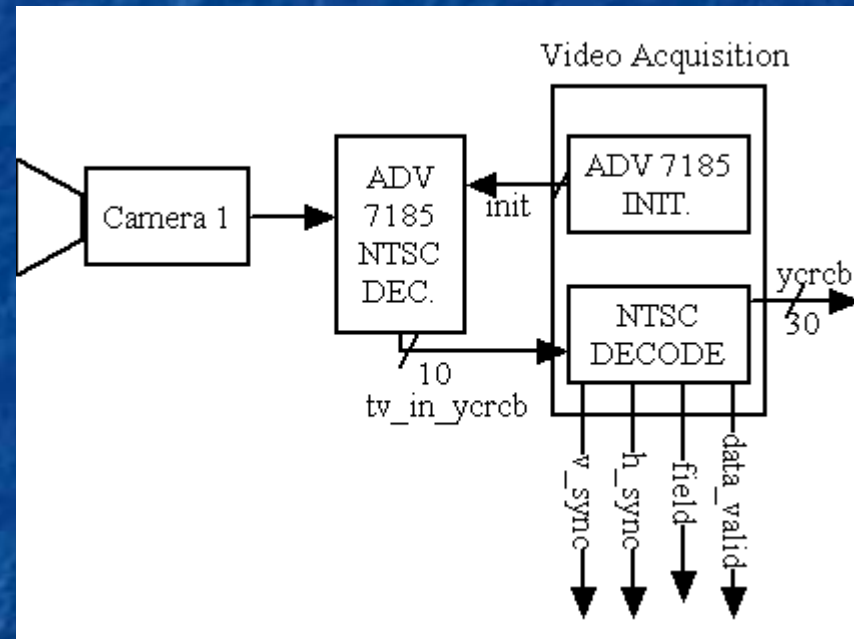


Division of Labor

- Obinna:
 - Input
 - Video Processing
- Jyotsna:
 - Control
 - Output

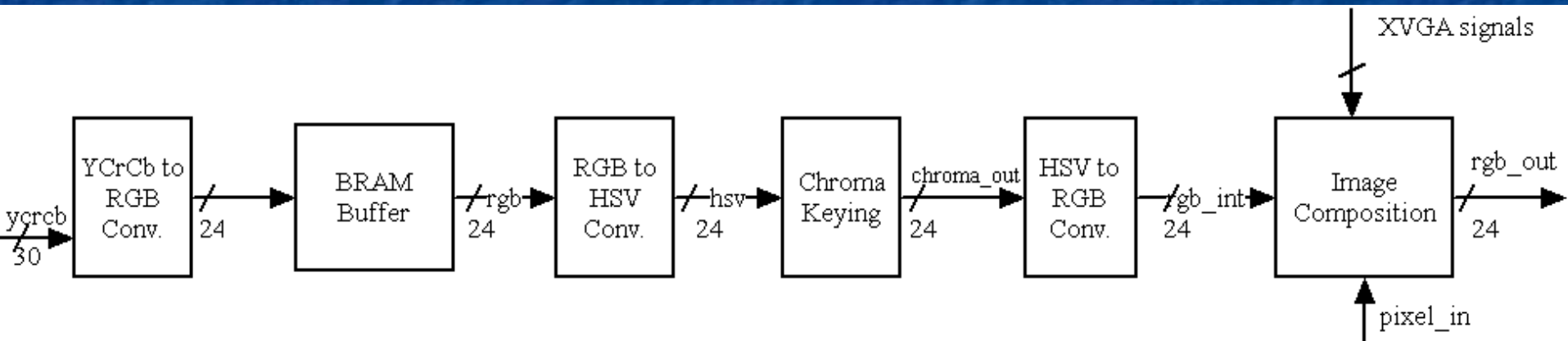
Input

- Generation of the NTSC-decoder chip initialization signals
- Generation of YCrCb data
- Generation of vertical and horizontal synchronization signals



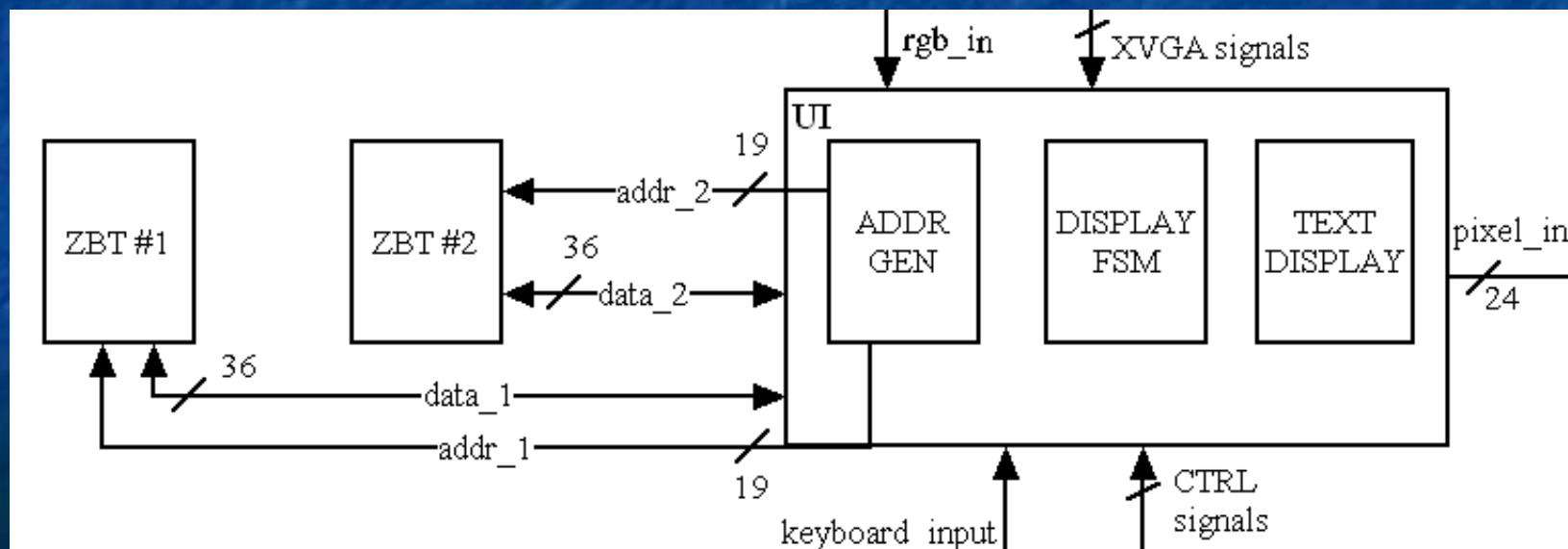
Video Processing

- Image Composition module generates the composite video signal to be output
- Chroma keying is commonly known as blue screening



Control

- Allows user to take pictures and stores these in memory
- Allows the user to switch between pictures
- Allows input of text directly into screen



Output

- Output is finally displayed onto a VGA monitor
- Signals from the image composition block go to the ADV7125 Video DAC.

Improvements

- Second camera to allow real-time feed
- Multiple display options
- Adding a graphical interface

Timeline

- 11/16
 - Input module
 - ycrCb to rgb conv
- 11/23
 - Address generation module
 - Text display module
 - Conversion modules
 - Image composition module
- 11/30
 - Display FSM
 - Output module
 - Video Buffering
- 12/07
 - Working prototype