Digital Camera Interface

INTERFACE BETWEEN
THE C3088 CAMERA (OV6620 CHIP OMNIVISION)
A COMPUTER

USING THE AVR Atmega16

PROPOSED TASKS:

- CAMERA WORKING--> IMAGES IN TV
- COMMUNICATIONS WITH PC (USART)
- ACCESS TO REGISTERS IN THE CAMERA (I2C)
- READ LINE FROM CAMERA AND SEND TO PC
- READ IMAGE FROM CAMERA AND SEND TO PC
- LITTLE IMAGES PROCESS & SEND RESULT TO PC
SOFTWARE MODULES:

SERIAL COMUNICATIONS
- BASIC FOR DEBUGGING
- RECEIVING BUFFER
- INTERRUPTION

I2C COMMUNICATION WITH THE CAMERA
- SCCB BUS AND I2C
- TWO WIRE SERIAL INTERFACE

BMP

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<td>info header</td>
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<td>optional palette</td>
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GETTING THE IMAGE
- VERTICAL LINE READING
- HORIZONTAL LINE READING

LITTLE IMAGE PROCESS

SERVO

MAIN
RESULTS

....Control Camera Program....
Inaki Navarro Oiza (c)2004
Type HELP and return for help

ACK
HELP MENU-Commands:
RR arg1
WR arg1 arg2
READALL
RESET
MIRRORON
MIRROROFF
PHOTO
TESTBMP
PANORAMIC
SERVO arg1
SCAN
MOVESERVO
TRACK