

HANDSHAKING SERIAL PROTOCOL

Start commands:

- "1" → Init word.
Flex response is "1".
- "*QQ*SS*" → Start camera configuration.
QQ could be 00, 01, or 02 and it represents the quality value.
SS could be 00, or 01 and it checks if the micro has sent an image to the PC or not.
Flex response is "1".

After the above two commands, the camera is ready to capture image.

Image capturing commands:

- "*S*****" → Sleep command
- "*A*****" → Activate command
- "*R*RR*****" → Resolution command.
RR could be 00, 01, or 02 and it represents 640x480, 320x240 and 160x120 resolutions respectively
- "*T*TT*****" → Time divisor command to control the pixel rate and then the frame rate.
TT could be [00..07].
- "*H*HH*VV*****" → HBLANK/VBLANK command to set the HBLANK, VBLANK values.
HBLANK Time register defines data blank time between current line and next line. (>208)
VBLANK Time register indicates frame boundary between continuous frames. (>8)
- "*D*WW*HH*XX*YY*" → Set a window.
WW = width, HH = height, XX = x position and YY = y position.
- "*1*RR*VV*****" → Command for changing register.
RR = hexadecimal register address, and VV -> Hexadecimal value to set.