

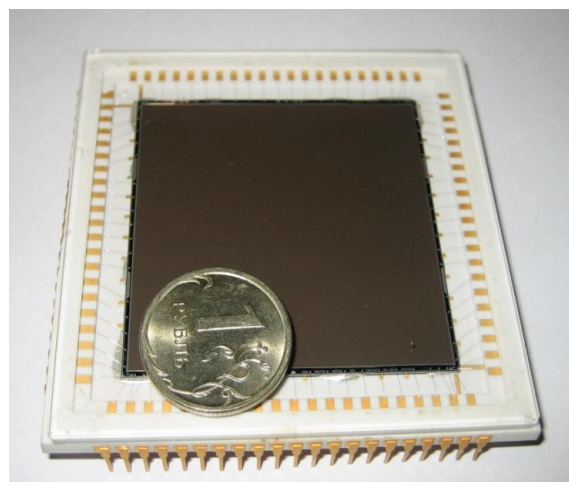
LARGE FORMAT CCD "QUADRO"

Experimental sample

CCD "Quadro" has four independent sections, bulk n-channel and 4096x4096 pixels.

Device photosensitive area includes four independent storage sections which could operate in pulse and continuous illumination modes. CCD has central symmetry, two output registers and four output units.

The device is intended for application in TV equipment in conditions of pulse and continuous illumination, image conversion and processing systems as well as measurement equipment. Register output frequency is 1÷40 MHz.



SPECIFICATIONS

Dimensions (with contacts), mm	66×66×10
Number of pixels	4096×4096
Photosensitive area size, mm	5,056×45,056
Pixel size, (H×V), mm	11×11
Saturation voltage, V	1.1
Spectral sensitivity ($\lambda=670$ nm), V/μm·J/cm ²	5
Mean dark signal, mV/s	30
Output signal mean square nonuniformity, %	2
Noise, ē	22
Dynamic range	8000
Modulation depth at space frequency of $f_N/2$ across horizontal and vertical, %	55
Transfer inefficiency	$1 \cdot 10^{-5}$
Number of contacts	84

Technical drawing of a square plate with a grid of holes. The plate has a total width and height of $66 \pm 0.5^*$ mm. It features a central grid of 13 x 13 holes, each with a diameter of 3.5 mm and a pitch of 4.5 mm. The grid is surrounded by a 2.4 mm wide border. The drawing includes dimensions for the plate thickness (1 min), the grid area (84 mm x 84 mm), and the overall dimensions (66 ± 0.5 mm). A key (Ключ) is indicated for the grid area.

$\text{Ln}K_m$	$S\%$
0.4	5
0.5	35
0.6	58
0.7	90
0.75	95
0.8	85
0.9	58
1.0	20

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