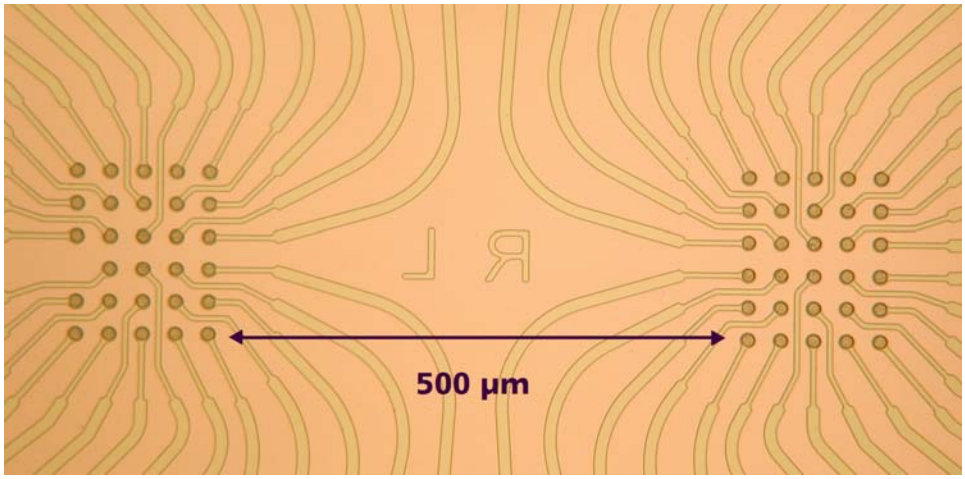
HighDenseMEA
HD30/10iR-ITO

multichannel systems

High Density Microelectrode Array with Internal Reference Electrode



Technical Specifications: HighDenseMEA

Temperature compartibility	0 - 125 °C
Dimension (W x D x H)	49 mm x 49 mm x 1 mm
Thickness (region of electrodes)	50 µm
Base material	Glass
Contact pads and track material	Indium tin oxide (ITO)
Electrode diameter	10 µm
Interelectrode distance (centre to centre)	30 µm
Distance between electrode fields	500 µm
Electrode height	Planar
Electrode type	Titanium nitride (TiN)
Isolation type	Silicone nitride 500 nm (PEVCD)
Electrode impedance	Approximately 250 - 400 kΩ
Electrode layout grid	2 x (5 x 6)
Number of electrodes	60
Reference electrodes	with internal reference electrode
MC_Rack:	
Source Layout in Data Source Setup	2 dim. (MEA)
MCS Channel map	HighDenseMEA.cmp HighDenseMEA_L.cmp HighDenseMEA_R.cmp

MEA perfusion chamber	(w/o) Without ring (gr) Glass ring: ID +/- 20 mm, OD 24 mm, height 6 / 12 mm (pr) Plastic ring without thread: ID 26 mm, OD 30 mm, height 6 / 3 mm (pr-T) Plastic ring with thread: ID 25 mm, OD 30 mm, height 6 / 15 mm

Multi Channel Systems MCS GmbH
Aspenhaustrasse 21
72770 Reutlingen
Germany

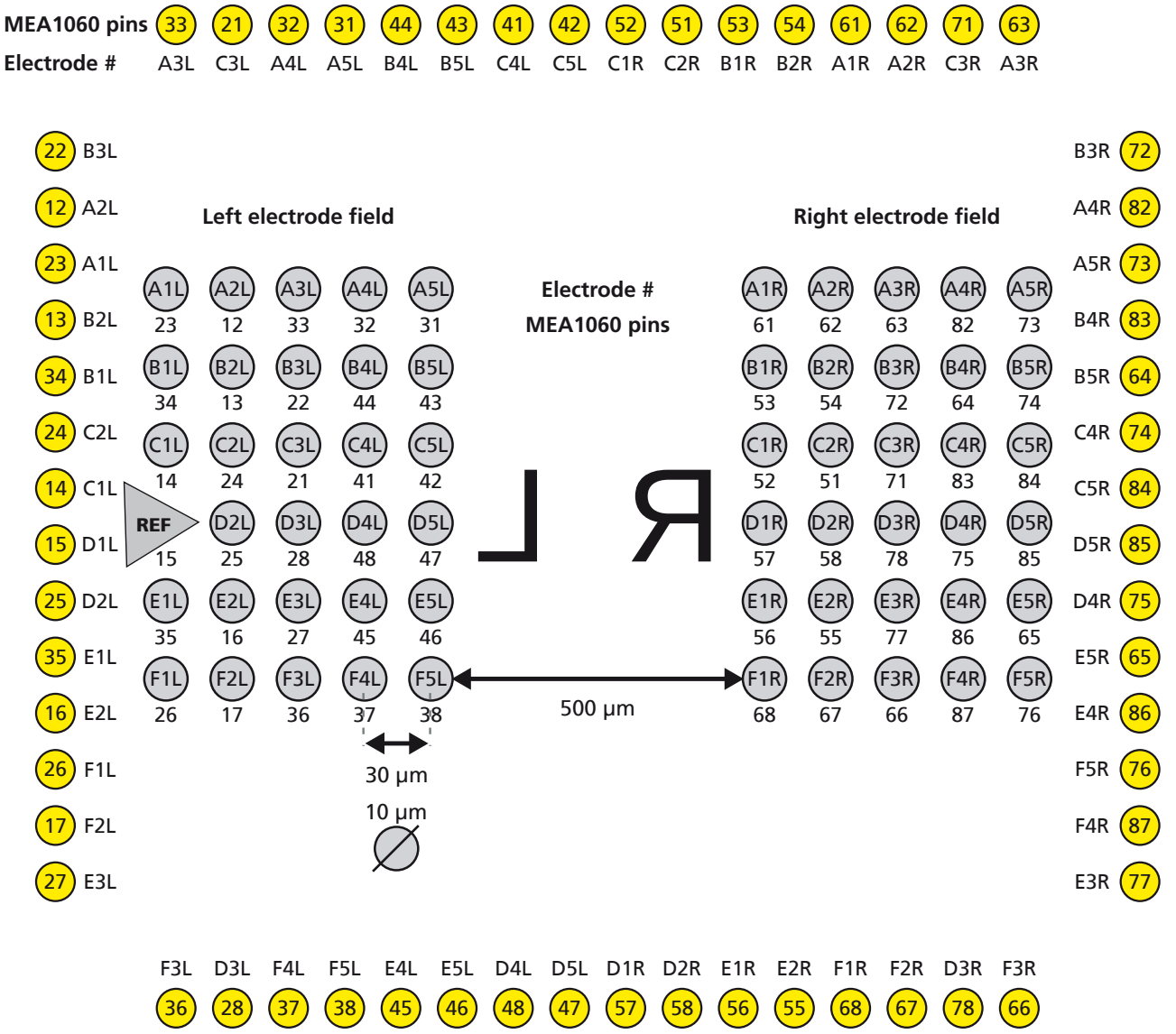
Fon +49-7121-9 09 25- 0
Fax +49-7121-9 09 25-11

info@multichannelsystems.com
www.multichannelsystems.com

HighDenseMEA
HD30/10iR-ITO

multichannel systems

Electrode Layout



The first letter of the electrode number code refers to the row number, the digit is the column number, and the second letter refers to the electrode field (left or right) of the HighDenseMEA. The specified MEA1060 pin numbers are the channel numbers that are used in the MC_Rack program. The electrode D1 of the left electrode field, connected to channel 15 in MC_Rack is missing. It is replaced by a big internal reference electrode.

Multi Channel Systems MCS GmbH
Aspenhaustrasse 21
72770 Reutlingen
Germany

Fon +49-7121-9 09 25- 0
Fax +49-7121-9 09 25-11

info@multichannelsystems.com
www.multichannelsystems.com