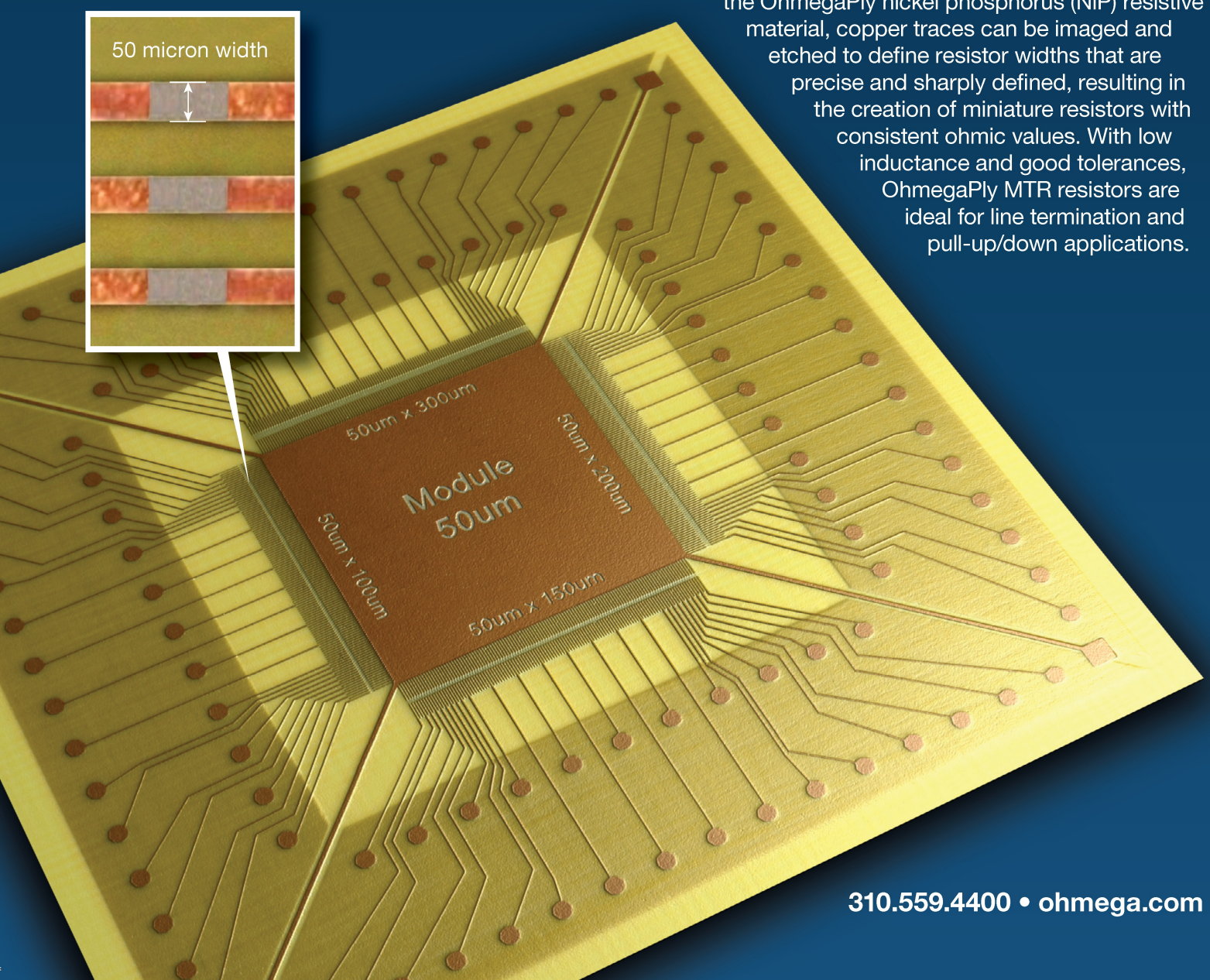
Introducing a thin film resistor built into a printed circuit board trace less than 100 microns wide.

OhmegaPly MTR™
Micro Trace Resistors.™

OhmegaPly MTR™ Technology allows thin film resistors to be built within a printed circuit trace that is less than 100 microns (0.004”) wide. Using standard subtractive printed circuit board processes, it is ideal for high density interconnect (HDI) designs where passive component placement is difficult or impossible.

By utilizing the differential processes unique to the OhmegaPly nickel phosphorus (NiP) resistive material, copper traces can be imaged and etched to define resistor widths that are precise and sharply defined, resulting in the creation of miniature resistors with consistent ohmic values. With low inductance and good tolerances, OhmegaPly MTR resistors are ideal for line termination and pull-up/down applications.



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OhmegaPly MTR™ Micro Trace Resisters™ Test Results

Resistivity	Resistor Width	Two Squares			Four Squares			Six Squares		
		Resistance (Ohm)	Tolerance (%)	Power Rating (mW)	Resistance (Ohm)	Tolerance (%)	Power Rating (mW)	Resistance (Ohm)	Tolerance (%)	Power Rating (mW)
10 ohm/sq	50 Micron	20	40	60	40	40	90	60	40	110
	75 Micron	20	25	110	40	25	140	60	25	155
	100 Micron	20	15	125	40	15	180	60	15	180
	125 Micron	20	15	150	40	15	215	60	15	300
25 ohm/sq	50 Micron	50	40	40	100	30	50	150	25	55
	75 Micron	50	20	60	100	20	80	150	15	80
	100 Micron	50	15	70	100	15	100	150	15	125
	125 Micron	50	15	90	100	15	125	150	15	165
50 ohm/sq	50 Micron	100	25	30	200	25	45	300	25	55
	75 Micron	100	20	45	200	15	65	300	15	80
	100 Micron	100	10	60	200	10	85	300	10	115
	125 Micron	100	10	80	200	10	100	300	10	120

Power Density Versus Resistor Area for OhmegaPly MTR Test Boards