

An Analog Vision Chip for Real Time Motion Computation

Rainer Hoehler, Marc Melchior, Hans Strack

Abstract

In this paper we present a circuit integrating a biologically inspired algorithm not only for motion detection but also for optical speed measurement. The function of the chip is mainly based on finding a maximum of a correlation function. Unlike other hardware implementations, a continuous range of velocities can be measured. Test results validate the function of the chip over a wide range of velocities.