






CHARM Video Tracking Comparison Table






	Product	Size of board	Data Interfaces	Video Inputs	Video Outputs	Processing Channels
	CHARM 100NX	100mm x 100mm	4 x RS422 Ethernet CAN bus, IRIG, 8 x GPIO	2 x SD/HD/3G /6G SDI	2 x SD/HD/3G/6G SDI	1
	CHARM 10CE	84mm x 55mm	Ethernet, 2 x RS232/RS422 or RS485	2 x PAL/NTSC, 1 x YPbPr, 1 x SD/HD/ 3G SDI	1 x Display Port+, 1 x LVDS	2
	CHARM 100CL	100mm x 100mm	3 x RS422 Ethernet IRIG, CANbus	2 x SD/HD/3G-SDI 1 x CameraLink (Base/Medium/Full)	2 x SD/HD/3G-SDI	2
	CHARM 100	100mm x 100mm	4 x RS422 Ethernet CANbus	2 x PAL/NTSC 2 x YPbPr 4 x SD/HD-SDI	4 x PAL/NTSC /YPbPr 4 x SD/HD-SDI	2
	CHARM Module	50mm x 50mm	2 x UART Ethernet	1 x Parallel digital	1 x HDMI 1 x Parallel digital	1

FrameWorkx

Vision4ce offer an Image Processing framework for the CHARM 100 board. The proposed framework provides video capture and display functionality, and also includes an API definition for the implementation of Alternative Image enhancement algorithms.

The API allows the customer to develop their own C++ processing libraries and then use the framework to Input video frames and output video and symbology to the selected video output.

CHARM Video Tracking Comparison Table Continued...

	Product	Size of board	Data Interfaces	Video Inputs	Video Outputs	Processing Channels
	CHARM 80	80mm x 90mm	2 x RS232 2 x RS422 Ethernet	2 x PAL/NTSC or 2 x HD-SDI	2 x PAL/NTSC or 2 x HD-SDI	1
	CHARM 3U	Single Eurocard	2 x RS232 2 x RS422 Ethernet	2 x PAL/NTSC	2 x PAL/NTSC	1
	CHARM 3U cPCI	3U x 160mm	2 x RS232 2 x RS422 Ethernet	2 x PAL/NTSC or 2 x HD-SDI	2 x PAL/NTSC or 2 x HD-SDI	1
	CHARM 6U	VME Double Eurocard	2 x RS232 2 x RS422 Ethernet, VME	2 x PAL/NTSC 2 x HD-SDI	2 x PAL/NTSC 2 x HD-SDI	1
	CHARM 70	70mm x 100mm	1 x RS232, 1 x RS422, 1 x Ethernet	2 x PAL/NTSC	1 x HDMI	1

All CHARM products and DART offer the following features:

- Multiple object detection tracking
- Centroid & edge measurement
- Feature based correlation algorithm
- Moving object detection
- Adaptive background removal
- Automatic coast
- Grey level invariant algorithms
- Robust clutter rejection
- Platform filters.

Optional features include:

- Electronic image stabilisation
- Video compression & streaming
- Servo platform control
- Object classification

Note :Platform filters and Optional features are not Available with DART software.