

## Test by Similarity for IIDC Cameras

Generally, compliance test for any 1394 device follows a Black Box approach. Only features, registers, and so on that are accessible without opening the device are examined during testing. For IIDC cameras, these feature are the standard ConfigROM defined by IEEE 1394a-2000 and the register set as defined by the various revisions of the IIDC standard.

Strictly speaking, two cameras are identical concerning IIDC implementation if their registers sets and IIDC relevant parts of the ConfigROM are identical. However, given the large number of IIDC registers and the fact that some content differs because of non-1394 related parts (i.e. geometrical resolution of the sensor), this approach is not practical. Therefore, Test by Similarity for IIDC cameras is based on a subset of these features. If they are identical, then it can be assumed that the firmware implementation inside the camera is the same as inside the camera that successfully passed Compliance Test.

Given this, two IIDC cameras are Similar with respect to Compliance, if the following values are identical:

Value	Place	Remark
BASIC_FUNC_INQ	IIDC register offset 0x400	General IIDC features for control of the camera are identical
FEATURE_HI_INQ	IIDC register offset 0x404	Camera implements same features for image control
FEATURE_LO_INQ	IIDC register offset 0x408	
V_CSR_INQ_7_x	IIDC register offset 0x2E0 - 0x2FC	Implementation of Scalable Image Format is identical
unit_sw_version	ConfigROM Unit Directory	If different, then implementation are based on different revisions of the IIDC standard
command_regs_base	ConfigROM Unit Dependent Directory	If different, than IIDC implementation has been completely reworked; Similarity cannot be guaranteed