

Cameras Monitor Spacecraft Integrity to Prevent Failures



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NASA Technology

- ◆ The Curiosity rover is exploring the surface of Mars in part to help figure out whether the Red Planet could ever have supported living organisms
- ◆ The Space Agency needed to outfit the rover with the latest in radiation-hardened cameras in order to capture vibrant images of the planet's terrain



Technology Transfer

- ◆ Malin Space Science Systems, which had developed cameras for several Mars satellites, entered into a contract with NASA to supply Curiosity with 4 of its 17 cameras
- ◆ Malin's cameras are responsible for landing the rover, taking photos of varying focal lengths, and (through a zoom feature) capturing images of features thinner than the diameter of a human hair

Benefits

- ◆ The firm has now developed an off-the-shelf imaging system called ECAM that can be installed on satellites to monitor their functionality in space
- ◆ Monitoring a satellite can help in troubleshooting problems that may arise during activities such as antenna and solar array deployment