



ENGINEERING CHANGE FORM				
ENGINEERING REQUEST/NOTICE Request Notice Number X 008		DRAWING/DOCUMENT TITLE Increased current required for SPB SMA Actuators		DATE 4/30/2004
SERIAL NUMBER (If Applicable)	ITEM TYPE Hardware Software X	DRAWING/DOCUMENT NUMBER thm_pcb_sch_001_PCB ETU thm_sys_101h_IDPU-ESA ICD		PROJECT THEMIS
REASON FOR REQUEST Total resistance in SPB actuator circuit was determined to be twice what was originally estimated. Total resistance is 5.5 not 2.5 ohms: 1. 22" @ 0.5ohms (or 11 ohms) for 1 SMA wire 2. 11ohms/2 (or 5.5 ohms) for parallel combination 3. 2A is required to actuate mechanism in air			REQUESTER Bill Donakowski	
			Disposition	Date Effective
CHANGE DESCRIPTION (Request/Response) Run SMA actuators in series (Doors 1,2 and Doors 3,4) off of 28V Actuator service instead of separately off of 5V SMA LVPS service. Change PCB ETU layout to accommodate change Change Probe BAU current limit set point on 28V Actuator Service in IDPU-to-Probe ICD Add 1.5 ohm resistor in SPB mechanical assemblies Change PCB Flight layout to spare Door FETs			1 1 1 1	5/4/04 5/21/04 6/1/04 8/11/04
DISPOSITION/REMARKS			DISPOSITION CODES 1) Change in design spec, drawing, or schematic 2) Replace 3) Rework 4) Use As Is 5) See Note/Attachment	
COGNIZANT ENGINEER		Class 1 Class 2 <input type="checkbox"/> <input type="checkbox"/>		
APPROVALS (Initials/Date) Lead Engineer _____ Lead Engineer _____ QA Manager _____ Project Manager _____ Systems Engineer _____		CLASS CODES 1 Major Cost/Schedule 2 Minor Cost/Schedule		NEXT HIGHER ASSEMBLY <u>IDPU, SPB</u> _____ _____ _____