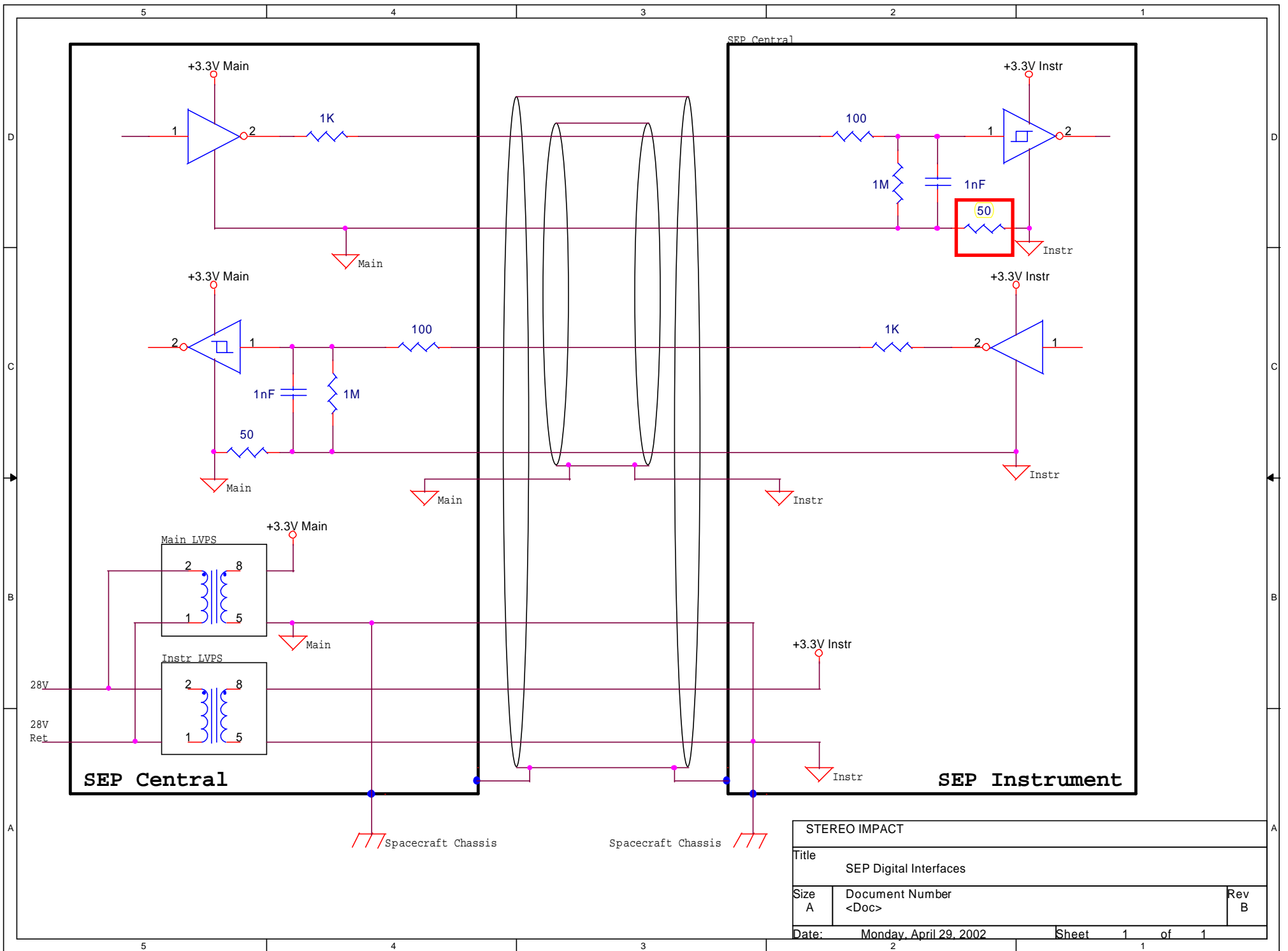


## STEREO CONFIGURATION CHANGE REQUEST

For Office Use Only	TITLE: <a href="#">SEPT Single ended interface</a>		CLASS:		NUMBER:																													
			I	DATE:																														
		II																																
CONFIGURED ITEM:  STS Number:                      Payload: <a href="#">STEREO</a> Component :                      Experiment: <a href="#">IMPACT</a> Component Part #:                Serial #:			ORIGINATOR: Name: <a href="#">Dave Curtis</a> Organization: <a href="#">U.C. Berkeley</a> Phone: <a href="#">510-642-5998</a> Email: <a href="mailto:dwc@ssl.berkeley.edu">dwc@ssl.berkeley.edu</a>			PRIORITY: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Urgent <input type="checkbox"/> Emergency																												
TYPE OF REQUEST:		RESPONSIBLE ORGANIZATION/INDIVIDUAL:			IMPACTS: (If yes attach additional pages)																													
<input type="checkbox"/>	Configuration				<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">COST:</td> <td style="width: 10%;"></td> <td style="width: 10%;">Yes</td> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 10%;">No</td> </tr> <tr> <td>SCHEDULE:</td> <td></td> <td>Yes</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>No</td> </tr> </table>		COST:		Yes	<input checked="" type="checkbox"/>	No	SCHEDULE:		Yes	<input checked="" type="checkbox"/>	No																		
COST:		Yes	<input checked="" type="checkbox"/>	No																														
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<input checked="" type="checkbox"/>	Waiver	#																																
<input type="checkbox"/>	Other:																																	
REASONS FOR CHANGE:					RETEST REQUIRED:																													
<input checked="" type="checkbox"/>	Improvement	<input type="checkbox"/>	Test/Payload Failure	<input type="checkbox"/>	New Document: <input type="checkbox"/> No																													
<input type="checkbox"/>	Reliability	<input type="checkbox"/>	Specification Requirements	<input type="checkbox"/>	Other: <input type="checkbox"/> Yes																													
PROPOSED CHANGE (Attach additional pages as required): <a href="#">Use single-ended digital interfaces between the SEP Central and SEPT-E, and SEPT-NS. This violates the Project EMC requirements as called out in 7381-9030-, section 3.2.2.4.</a>																																		
RATIONALE (Attach additional pages as required): <p>The original design as shown in the attached schematic was quasi-differential in that the 50 ohm resistor isolated the signal return from the instrument return. This was deemed acceptable (without waiver) by the EMC committee when it was first proposed.</p> <p>We recently discovered that in the SEPT units a jumper was left across the 50 ohm resistors in the receiver of the serial digital signal (the resistor on the right in the circuit drawing). Meanwhile all 4 flight SEPT units have completed environmental testing, and the FM1 units have been through EMC tests. The results of the EMC Conducted Emissions test on the FM1 SEPT units harness is attached, and shows that we are in-spec (note that the units were bonded to a metal bench top to simulate the spacecraft chassis ground for this test, and were operating).</p> <p>To fix this problem would involve opening up the 4 flight units and subsequent retest which has significant cost and schedule implications. Based on the EMC test results we propose to fly the instruments as-is.</p>																																		
DOCUMENTS/DRAWINGS AFFECTED (Document No./Title/Section) :																																		
AFFECTED (Check all that apply): <table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3" style="vertical-align: top;">FLIGHT SYSTEMS:</td> <td colspan="4" style="vertical-align: top;">GROUND SYSTEMS:</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Avionics</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Electrical and Cables</td> <td style="text-align: center;"><input type="checkbox"/></td> <td colspan="2"></td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Experiment</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Software/Firmware</td> <td style="text-align: center;"><input type="checkbox"/></td> <td colspan="2"></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Structures and Mechanical</td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Other:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td colspan="2">Other:</td> </tr> </table>							FLIGHT SYSTEMS:			GROUND SYSTEMS:				<input type="checkbox"/>	Avionics	<input type="checkbox"/>	Electrical and Cables	<input type="checkbox"/>			<input checked="" type="checkbox"/>	Experiment	<input type="checkbox"/>	Software/Firmware	<input type="checkbox"/>			<input type="checkbox"/>	Structures and Mechanical	<input type="checkbox"/>	Other:	<input type="checkbox"/>	Other:	
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REQUIRED APPROVAL DATE: _____																																		
REQUIRED JUSTIFICATION:																																		
						(Page 1 of 2)																												

## STEREO CONFIGURATION CHANGE REQUEST

For Office Use Only	TITLE:		CLASS:		NUMBER:
			I		DATE:
		II			
CONTRACT/AGREEMENT NUMBER EFFECTIVITY:					
	STEREO NAS5-97271	√	IMPACT S-13635Y	PLASTIC NAS5-00132	SECCHI S-13631Y
DOCUMENTS/DRAWINGS TO BE REVISED:					
Document/Drawing Number:		Document/Drawing Title:		Section(s) No.	EO No.:
PROCESSING APPROVAL:					
		CCB			
		Out of Board			
		Emergency		Systems Engineer	Date
CCB APPROVAL:					
CCB ACTION DATE:		CCB ACTION ITEMS/CONDITIONS:			
Approved Denied Withdrawn Hold					
CLOSEOUT COMMENTS:				DATE OF CLOSEOUT:	
				CMO	



STEREO IMPACT		
Title SEP Digital Interfaces		
Size A	Document Number <Doc>	Rev B
Date: Monday, April 29, 2002	Sheet 1	of 1

# EMC TEMPEST

MIL-STD 461C Modified - Common Mode

CE01/03 100 Hz - 50 MHz

