F509U

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| Board ID | Doc Version | Date | Author | ASIC ID | Production |
| F509U | 0.1 | 19.05.2022 | L. Ghislotti | 509 | US |

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|  | **#** | **Test Description** | **Pass** | **Note** | |
| Visual | 1 | Visual inspection | Yes | See notes (if any) | |
| Bias | 2 | Analog | Yes | AVDD [V] | 1.794 |
| Yes | IVDD [mA] | 134.7 |
| Digital | Yes | DVDD [V] | 1.793 |
| Yes | IDVDD [mA] | 5 |
| Calibration | Yes | 3V3 [V] | 2.989 |
| Yes | I3V3 [mA] | 3 |
| Bias current | Yes | Ibias [mA] | 4.91 |
| Reference Voltages | Yes | VCMSH [V] | 1.196 |
| Yes | VCM [V] | 0.882 |
| Yes | RVCM [V] | 0.897 |
| Digital | 3 | Configuration test | Yes |  | |
| Wrong address test | Yes |  | |
| Temperature Sensor | Yes | ADC | 1083 |
| T [°C] | 29.423 |
| Analog | 4 | Input-output characteristic | Yes | # of non resp. ch | 0 |
| 5 | Noise ENC FWHM @ tp=6 | Yes | Ch 0 [keV] | 6.210 |
| Ch 7 [keV] | 21.491 |
| Ch 15 [keV] | 6.746 |
| Ch 16 [keV] | 14.315 |
| Ch 23 [keV] | 23.762 |
| Ch 31 [keV] | 13.266 |
| 6 | Threshold dispersion @ tp=6 | Yes | Before FT [DAC] | 6.318 |
| After FT [DAC] | 3.723 |
| 7 | Pedestal dispersion @ tp=6 | Yes | Dispersion [ADC] | 7.573 |

**Notes:**

scratches on top  
scratches on bottom