

Justification For Supplement

As of December 2006, all the subsystems required to perform an end-to-end lab evaluation of the first 1x8 row of SuperCam have been built and tested. Only the SIS devices (scheduled to arrive in early January 2007) are needed to conduct further lab tests. Once the first SuperCam row has been demonstrated, we will replicate the remaining 1x8 mixer arrays, bias cards, and IF processing boards. Since the components are being replicated, we know the costs associated with their fabrication to a high degree of certainty. Most of the subsystem costs fall within the original 2004 budget. However, additional funds are needed for parts and labor to complete the expansion of the array to its full 8x8 format and fabricate the telescope re-imaging optics.

Figure 1 outlines the subsystems that require further effort and the **procurement costs** necessary for their completion. The Supplement budget also includes funds for the individuals needed to complete and test the full array. If Supplemental funding is provided by March 2007, SuperCam should be completed by the end of 2007.

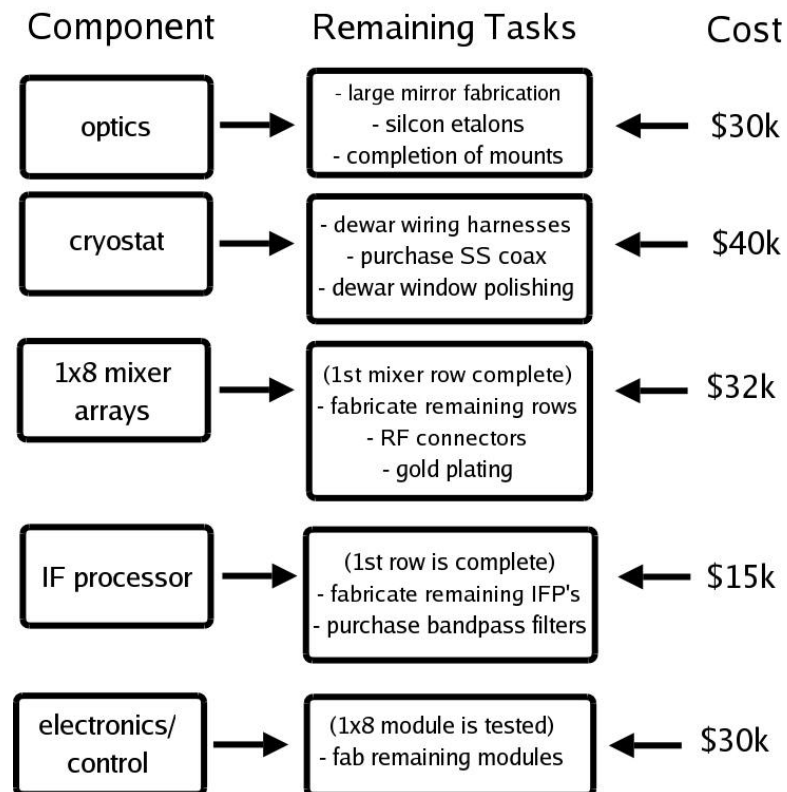


Figure 1: Overview of the scope of work and procurement costs associated with this supplemental budget request. All SuperCam technology development is complete, leaving only the fabrication and labor costs for producing the remaining rows of the array.