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## Engineering Challenges for detectors at the ILC

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Over the last years two proposals for experiments at the ILC have been developed. Extensive R&D has been carried out around the world to develop the needed technologies. Furthermore a first round of engineering studies was made as part of the ILC TDR to understand the integration of these different sub-systems into coherent and integrated detector concepts. Among the key challenges for the subdetectors are the extreme low mass/ low power requirements or the extreme channel densities needed in particle flow based detectors. Throughout these studies special care was taken to ensure that the engineering models and the simulation models, used in studies of the physics capabilities of the detectors, stay synchronized. In the near future, the models will need to be evolved to take the special requirements of the potential ILC site in Japan into account. In this talk, the state of the integration of the detectors, and the future directions, will be discussed.

### Summary

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