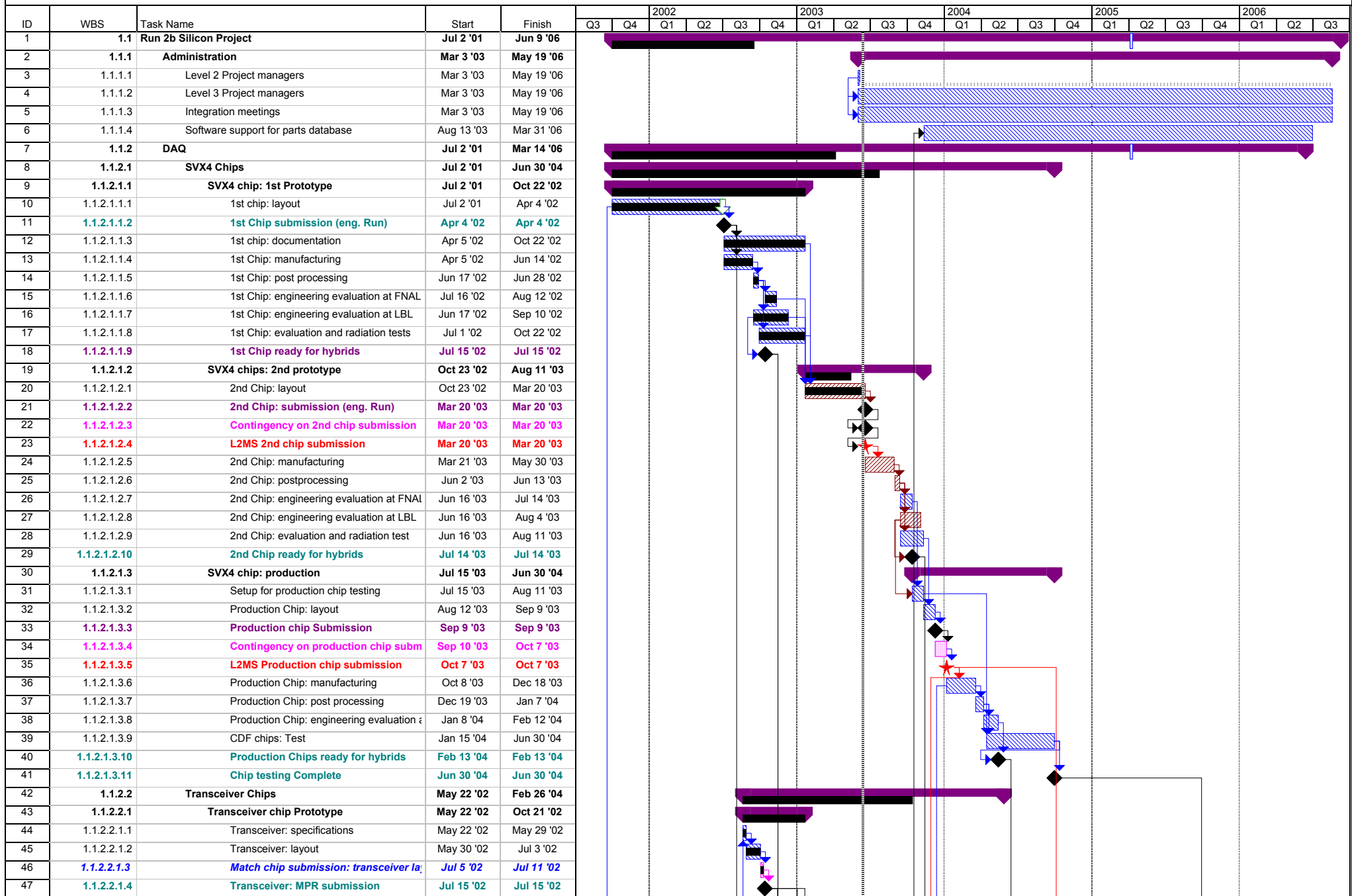


CDF Run2b Silicon Detector Schedule - Gantt Chart





CDF Run2b Silicon Detector Schedule - Gantt Chart

ID	WBS	Task Name	Start	Finish	2002				2003				2004				2005				2006		
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
95	1.1.2.3.1.3.8	Preproduction Hybrid assembly and	Feb 27 '04	Jul 2 '04																			
96	1.1.2.3.1.3.9	Preproduction Hybrid burn-in	Mar 5 '04	Jul 12 '04																			
97	1.1.2.3.1.3.10	Preproduction Hybrid Available	Mar 18 '04	Mar 18 '04																			
98	1.1.2.3.1.3.11	Contingency on preproduction hy	Mar 19 '04	Apr 15 '04																			
99	1.1.2.3.1.3.12	L2MS preProduction hybrid availa	Apr 15 '04	Apr 15 '04																			
100	1.1.2.3.1.3.13	Preproduction Hybrid complete	Jul 19 '04	Jul 19 '04																			
101	1.1.2.3.1.4	Hybrid Production	Jun 14 '04	Jul 18 '05																			
102	1.1.2.3.1.4.1	Production Hybrid: layout	Jun 14 '04	Aug 9 '04																			
103	1.1.2.3.1.4.2	Production Hybrids: procurement	Jun 28 '04	Aug 9 '04																			
104	1.1.2.3.1.4.3	Production Hybrid Submission	Aug 9 '04	Aug 9 '04																			
105	1.1.2.3.1.4.4	Production Hybrid: manufacturing	Aug 10 '04	Jan 5 '05																			
106	1.1.2.3.1.4.5	Production Hybrid: assembly and tes	Oct 20 '04	Jul 1 '05																			
107	1.1.2.3.1.4.6	Production Hybrid burn-in	Oct 27 '04	Jul 11 '05																			
108	1.1.2.3.1.4.7	Production Hybrids Available	Nov 3 '04	Nov 3 '04																			
109	1.1.2.3.1.4.8	Contingency on Production Hybri	Nov 3 '04	Dec 2 '04																			
110	1.1.2.3.1.4.9	L2MS Production hybrid available	Dec 2 '04	Dec 2 '04																			
111	1.1.2.3.1.4.10	Hybrid Production Complete	Jul 18 '05	Jul 18 '05																			
112	1.1.2.3.2	Layer 0	Aug 26 '02	Nov 22 '04																			
113	1.1.2.3.2.1	Hybrid Layer 0 Prototype	Aug 26 '02	Mar 19 '03																			
114	1.1.2.3.2.1.1	Prototype#1 L0 hybrid: Layout	Aug 26 '02	Oct 21 '02																			
115	1.1.2.3.2.1.2	Prototype#1 L0 hybrid: Submissio	Oct 21 '02	Oct 21 '02																			
116	1.1.2.3.2.1.3	Prototype#1 L0 hybrid: manufacturin	Oct 22 '02	Jan 7 '03																			
117	1.1.2.3.2.1.4	Prototype #1 L0 Hybrid: assembly ar	Jan 8 '03	Feb 19 '03																			
118	1.1.2.3.2.1.5	Prototype#1 L0 hybrid Available	Jan 22 '03	Jan 22 '03																			
119	1.1.2.3.2.1.6	Prototype#1 L0 hybrid: evaluation at	Jan 23 '03	Mar 19 '03																			
120	1.1.2.3.2.2	Hybrid L0 production	May 27 '04	Nov 22 '04																			
121	1.1.2.3.2.2.1	Production L0 Hybrid: final layout	May 27 '04	Jul 23 '04																			
122	1.1.2.3.2.2.2	Production L0 Hybrid Submission	Jul 23 '04	Jul 23 '04																			
123	1.1.2.3.2.2.3	Production L0 hybrid: manufacturing	Jul 26 '04	Oct 4 '04																			
124	1.1.2.3.2.2.4	Production L0 Hybrid: assembly and	Oct 5 '04	Nov 15 '04																			
125	1.1.2.3.2.2.5	Production L0 Hybrid burn-in	Oct 12 '04	Nov 22 '04																			
126	1.1.2.3.2.2.6	Production L0 hybrid available	Oct 18 '04	Oct 18 '04																			
127	1.1.2.3.2.2.7	Production L0 hybrid complete	Nov 22 '04	Nov 22 '04																			
128	1.1.2.4	L0 analog signal cables	Sep 3 '01	Jul 19 '04																			
129	1.1.2.4.1	L0 cables FNAL	Sep 3 '01	Jul 19 '04																			
130	1.1.2.4.1.1	L0 cable prototype (FNAL)	Sep 3 '01	Mar 27 '03																			
131	1.1.2.4.1.1.1	L0 cables technology testing	Sep 3 '01	Jun 21 '02																			
132	1.1.2.4.1.1.2	L0 Test cables Available	Jun 21 '02	Jun 21 '02																			
133	1.1.2.4.1.1.3	L0 cable prototype design	Jun 11 '02	Jul 23 '02																			
134	1.1.2.4.1.1.4	L0 cable prototype fabrication	Oct 17 '02	Mar 14 '03																			
135	1.1.2.4.1.1.5	L0 cable prototype available (in U)	Jan 2 '03	Jan 2 '03																			
136	1.1.2.4.1.1.6	L0 cable prototype evaluation (US)	Jan 3 '03	Mar 27 '03																			
137	1.1.2.4.1.2	L0 cable production (FNAL)	Mar 28 '03	Jul 19 '04																			
138	1.1.2.4.1.2.1	Explicit Slack: L0 cable producti	Mar 28 '03	Oct 21 '03																			
139	1.1.2.4.1.2.2	L0 production cable design	Oct 22 '03	Dec 18 '03																			
140	1.1.2.4.1.2.3	L0 Cable Production Test	Feb 20 '04	Jul 12 '04																			
141	1.1.2.4.1.2.4	L0 cables Available (US)	Mar 4 '04	Mar 4 '04																			

CDF Run2b Silicon Detector Schedule - Gantt Chart

ID	WBS	Task Name	Start	Finish	2002				2003				2004				2005				2006									
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3					
142	1.1.2.4.1.2.5	L0 cables Complete	Jul 19 '04	Jul 19 '04																										
143	1.1.2.4.2	L0 Cable (Japan)	Sep 3 '01	Jul 2 '04																										
144	1.1.2.4.2.1	L0 cable Prototype (Japan)	Sep 3 '01	Feb 5 '03																										
145	1.1.2.4.2.1.1	L0 cables technology testing	Sep 3 '01	Jun 21 '02																										
146	1.1.2.4.2.1.2	L0 prototype cable fabrication	Jul 24 '02	Dec 13 '02																										
147	1.1.2.4.2.1.3	L0 cable prototype available (Japan)	Dec 13 '02	Dec 13 '02																										
148	1.1.2.4.2.1.4	L0 cable prototype evaluation (Japan)	Dec 16 '02	Feb 5 '03																										
149	1.1.2.4.2.2	L0 Production Cable Fabrication	Dec 19 '03	Jul 2 '04																										
150	1.1.2.4.2.2.1	L0 production cable fabrication	Dec 19 '03	May 13 '04																										
151	1.1.2.4.2.2.2	L0 production cables available (Japan)	Feb 5 '04	Feb 5 '04																										
152	1.1.2.4.2.2.3	L0 Cable Production Test	Feb 6 '04	Jul 2 '04																										
153	1.1.2.5	Bus Cables	Jan 11 '02	Oct 19 '04																										
154	1.1.2.5.1	Bus Cable Prototype	Jan 11 '02	Nov 4 '02																										
155	1.1.2.5.1.1	Prototype#1 Bus Cable: specs, design and	Jan 11 '02	May 31 '02																										
156	1.1.2.5.1.2	Prototype#1 Bus Cable Submission	May 31 '02	May 31 '02																										
157	1.1.2.5.1.3	Prototype#1 Bus Cable: Manufacturing	Jun 3 '02	Sep 10 '02																										
158	1.1.2.5.1.4	Prototype #1 Mechanical Bus cables available	Jul 26 '02	Jul 26 '02																										
159	1.1.2.5.1.5	Prototype#1 Electrical Bus Cable available	Sep 9 '02	Sep 9 '02																										
160	1.1.2.5.1.6	Prototype#1 Bus Cable: Evaluation	Sep 10 '02	Nov 4 '02																										
161	1.1.2.5.2	Bus Cable #2	Mar 7 '03	Aug 11 '03																										
162	1.1.2.5.2.1	#2 Bus Cable: design and Layout	Mar 7 '03	Apr 3 '03																										
163	1.1.2.5.2.2	#2 Bus Cable Submission	Apr 3 '03	Apr 3 '03																										
164	1.1.2.5.2.3	#2 manufacturing	Apr 4 '03	Jun 13 '03																										
165	1.1.2.5.2.4	#2 Mechanical Bus cables available	May 30 '03	May 30 '03																										
166	1.1.2.5.2.5	#2 Electrical Bus Cable available	Jun 13 '03	Jun 13 '03																										
167	1.1.2.5.2.6	#2 Bus Cable: Evaluation	Jun 16 '03	Aug 11 '03																										
168	1.1.2.5.3	Bus Cable Preproduction and Production	Oct 22 '03	Oct 19 '04																										
169	1.1.2.5.3.1	Preproduction Bus Cable: layout	Oct 22 '03	Dec 4 '03																										
170	1.1.2.5.3.2	Preproduction Bus Cable Submission	Dec 4 '03	Dec 4 '03																										
171	1.1.2.5.3.3	Preproduction Bus Cable: manufacturing	Dec 5 '03	Feb 19 '04																										
172	1.1.2.5.3.4	Preproduction Bus Cables available	Feb 19 '04	Feb 19 '04																										
173	1.1.2.5.3.5	Production Bus Cable: final design and layout	Jun 28 '04	Aug 9 '04																										
174	1.1.2.5.3.6	Production Bus Cable Submission	Aug 9 '04	Aug 9 '04																										
175	1.1.2.5.3.7	Production Bus Cable: manufacturing	Aug 10 '04	Oct 19 '04																										
176	1.1.2.5.3.8	Production Bus cables available	Sep 8 '04	Sep 8 '04																										
177	1.1.2.5.3.9	Production Bus Cables complete	Oct 19 '04	Oct 19 '04																										
178	1.1.2.6	Mini Port Card	Oct 29 '01	Mar 17 '05																										
179	1.1.2.6.1	Mini Port Card Prototypes	Oct 29 '01	Feb 28 '03																										
180	1.1.2.6.1.1	Prototype#1 MPC: specs, design and layout	Oct 29 '01	Apr 25 '02																										
181	1.1.2.6.1.2	Prototype#1 MPC submission	Apr 25 '02	Apr 25 '02																										
182	1.1.2.6.1.3	Prototype#1 MPC: manufacturing	Apr 26 '02	Oct 1 '02																										
183	1.1.2.6.1.4	Prototype#1 MPC: assembly and evaluation	Oct 2 '02	Feb 28 '03																										
184	1.1.2.6.1.5	Prototype#1 MPC Available	Oct 16 '02	Oct 16 '02																										
185	1.1.2.6.2	2nd Mini Port Card	Mar 3 '03	Aug 11 '03																										
186	1.1.2.6.2.1	#2 MPC: design and layout	Mar 3 '03	Apr 3 '03																										
187	1.1.2.6.2.2	#2 MPC Submission	Apr 3 '03	Apr 3 '03																										
188	1.1.2.6.2.3	#2 MPC: manufacturing	Apr 4 '03	Jun 13 '03																										

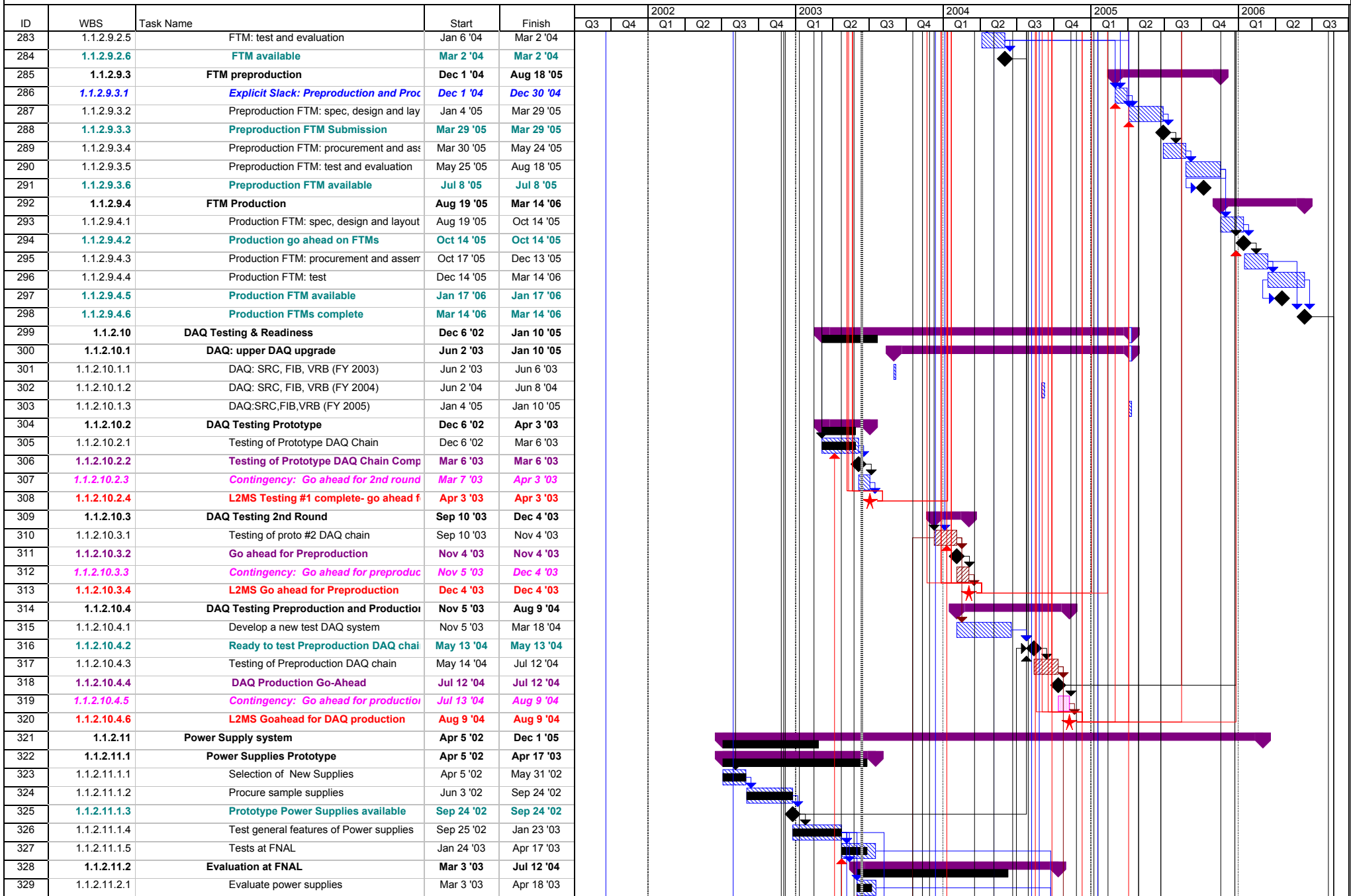
CDF Run2b Silicon Detector Schedule - Gantt Chart

ID	WBS	Task Name	Start	Finish	2002				2003				2004				2005				2006					
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
189	1.1.2.6.2.4	#2 MPC: assembly and evaluation	Jun 16 '03	Aug 11 '03																						
190	1.1.2.6.2.5	#2 MPC Available	Jul 7 '03	Jul 7 '03																						
191	1.1.2.6.3	Mini Port Card Preproduction	Oct 22 '03	Apr 15 '04																						
192	1.1.2.6.3.1	Preproduction MPC: design and layout	Oct 22 '03	Dec 4 '03																						
193	1.1.2.6.3.2	Preproduction MPC Submission	Dec 4 '03	Dec 4 '03																						
194	1.1.2.6.3.3	Preproduction MPC: manufacturing	Dec 5 '03	Feb 19 '04																						
195	1.1.2.6.3.4	Preproduction MPC assembly and evaluation	Feb 20 '04	Apr 15 '04																						
196	1.1.2.6.3.5	Preproduction MPC Available	Mar 4 '04	Mar 4 '04																						
197	1.1.2.6.4	Mini Port Card Production	Jul 13 '04	Mar 17 '05																						
198	1.1.2.6.4.1	Production MPC: design and layout	Jul 13 '04	Aug 9 '04																						
199	1.1.2.6.4.2	Production MPC go ahead	Aug 9 '04	Aug 9 '04																						
200	1.1.2.6.4.3	Production MPC: manufacturing	Aug 10 '04	Dec 2 '04																						
201	1.1.2.6.4.4	Production MPC available	Nov 2 '04	Nov 2 '04																						
202	1.1.2.6.4.5	Production MPC: assembly and evaluation	Oct 20 '04	Mar 17 '05																						
203	1.1.2.6.4.6	Production MPC complete	Mar 17 '05	Mar 17 '05																						
204	1.1.2.7	Junction Port Cards	Jun 17 '02	Oct 6 '05																						
205	1.1.2.7.1	Junction Port Card Prototypes	Jun 17 '02	Sep 19 '03																						
206	1.1.2.7.1.1	JPC for milestone #1	Jun 17 '02	Aug 12 '02																						
207	1.1.2.7.1.2	Explicit Slack: start JPC design	Nov 29 '02	Jan 30 '03																						
208	1.1.2.7.1.3	Prototype#1 JPC: specs, design and layout	Jan 31 '03	Apr 29 '03																						
209	1.1.2.7.1.4	Prototype#1 JPC Submission	Apr 29 '03	Apr 29 '03																						
210	1.1.2.7.1.5	Prototype#1 JPC: manufacturing	Apr 30 '03	May 28 '03																						
211	1.1.2.7.1.6	Prototype#1 JPC: loading and testing	May 29 '03	Jun 25 '03																						
212	1.1.2.7.1.7	Prototype#1 JPC Available	Jun 25 '03	Jun 25 '03																						
213	1.1.2.7.1.8	Prototype#1JPC: evaluation	Jun 26 '03	Sep 19 '03																						
214	1.1.2.7.2	2nd Junction Port Card	Sep 22 '03	Mar 2 '04																						
215	1.1.2.7.2.1	#2 JPC: design and layout	Sep 22 '03	Oct 31 '03																						
216	1.1.2.7.2.2	#2 JPC Submission	Oct 31 '03	Oct 31 '03																						
217	1.1.2.7.2.3	#2 JPC: manufacturing	Nov 3 '03	Dec 2 '03																						
218	1.1.2.7.2.4	#2 JPC: loading and testing	Dec 3 '03	Jan 5 '04																						
219	1.1.2.7.2.5	#2 JPC Available	Jan 5 '04	Jan 5 '04																						
220	1.1.2.7.2.6	#2: JPC evaluation	Jan 6 '04	Mar 2 '04																						
221	1.1.2.7.3	Junction Portcard Preproduction	Mar 3 '04	May 3 '05																						
222	1.1.2.7.3.1	Explicit Slack: Preproduction and proc	Mar 3 '04	Oct 1 '04																						
223	1.1.2.7.3.2	Preproduction JPC: design and layout	Oct 4 '04	Nov 30 '04																						
224	1.1.2.7.3.3	Preproduction JPC Submission	Nov 30 '04	Nov 30 '04																						
225	1.1.2.7.3.4	Preproduction JPC: manufacturing	Dec 1 '04	Dec 30 '04																						
226	1.1.2.7.3.5	Preproduction JPC: assembly	Jan 11 '05	Feb 8 '05																						
227	1.1.2.7.3.6	Preproduction JPC: testing	Feb 9 '05	Mar 8 '05																						
228	1.1.2.7.3.7	Preproduction JPC available	Mar 8 '05	Mar 8 '05																						
229	1.1.2.7.3.8	Preproduction JPC: evaluation	Mar 9 '05	May 3 '05																						
230	1.1.2.7.4	Junction Portcard Production	May 4 '05	Oct 6 '05																						
231	1.1.2.7.4.1	Production JPC: design and layout	May 4 '05	Jun 1 '05																						
232	1.1.2.7.4.2	Production JPC go ahead	Jun 1 '05	Jun 1 '05																						
233	1.1.2.7.4.3	Production JPC: manufacturing	Jun 2 '05	Jun 29 '05																						
234	1.1.2.7.4.4	Preproduction JPC: assembly	Jul 8 '05	Aug 18 '05																						
235	1.1.2.7.4.5	Production JPC: testing	Jun 9 '05	Sep 8 '05																						

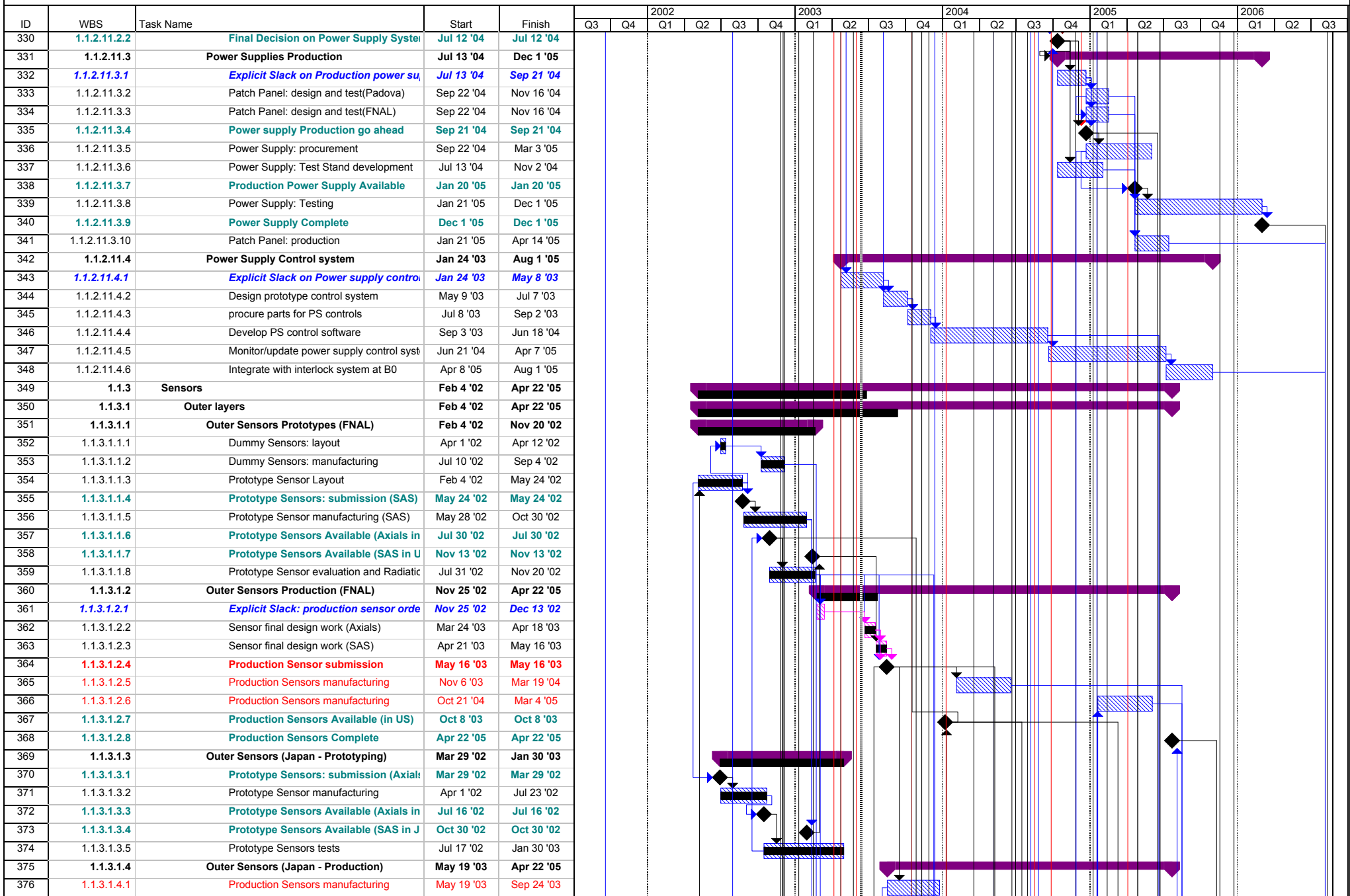
CDF Run2b Silicon Detector Schedule - Gantt Chart

ID	WBS	Task Name	Start	Finish	2002			2003				2004				2005				2006						
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3					
236	1.1.2.7.4.6	Production JPC Available	Jul 7 '05	Jul 7 '05																						
237	1.1.2.7.4.7	Production JPC Complete	Oct 6 '05	Oct 6 '05																						
238	1.1.2.8	<b>Cables</b>	Mar 8 '02	Oct 4 '05																						
239	1.1.2.8.1	<b>Cables from MPC to JPC</b>	Mar 8 '02	Oct 4 '05																						
240	1.1.2.8.1.1	<b>Cables from MPC to JPC: Prototypes</b>	Mar 8 '02	Jul 29 '02																						
241	1.1.2.8.1.1.1	Finalize cables and connectors for r	Mar 8 '02	May 2 '02																						
242	1.1.2.8.1.1.2	Procure cables for milestone#1	May 3 '02	May 31 '02																						
243	1.1.2.8.1.1.3	MPC-JPC Cables available for milk	Jul 29 '02	Jul 29 '02																						
244	1.1.2.8.1.2	<b>Cables from MPC to JPC: Preproductic</b>	Nov 5 '03	Oct 4 '05																						
245	1.1.2.8.1.2.1	Finalize preproduction cables and cc	Nov 5 '03	Jan 7 '04																						
246	1.1.2.8.1.2.2	MPC-JPC Preproduction Cables a	Jan 7 '04	Jan 7 '04																						
247	1.1.2.8.1.2.3	Preproduction MPC-JPC cables: pro	Dec 12 '03	Feb 12 '04																						
248	1.1.2.8.1.2.4	Preproduction MPC-JPC cable: testi	Feb 13 '04	Mar 11 '04																						
249	1.1.2.8.1.2.5	MPC-JPC preproduction cables av	Mar 11 '04	Mar 11 '04																						
250	1.1.2.8.1.2.6	Explicit Slack: Order cables from	Aug 10 '04	Mar 17 '05																						
251	1.1.2.8.1.2.7	Production go ahead on MPC -JPC	Mar 17 '05	Mar 17 '05																						
252	1.1.2.8.1.2.8	Production MPC-JPC cables: procur	Mar 18 '05	Jun 10 '05																						
253	1.1.2.8.1.2.9	Production MPC-JPC cable: testing	Jun 13 '05	Oct 4 '05																						
254	1.1.2.8.1.2.10	MPC-JPC production cables avail:	Jul 12 '05	Jul 12 '05																						
255	1.1.2.8.1.2.11	Production cables complete	Oct 4 '05	Oct 4 '05																						
256	1.1.2.8.2	<b>Cables from JPC to Crates</b>	Mar 8 '02	Oct 4 '05																						
257	1.1.2.8.2.1	<b>Cables from JPC to crates: prototypes</b>	Mar 8 '02	Jul 15 '02																						
258	1.1.2.8.2.1.1	Finalize cables and connectors for r	Mar 8 '02	May 2 '02																						
259	1.1.2.8.2.1.2	Procure cables for milestone #1	May 3 '02	May 3 '02																						
260	1.1.2.8.2.1.3	cable testing for milestone #1	Jul 1 '02	Jul 15 '02																						
261	1.1.2.8.2.1.4	JPC-Crates cables available for m	Jul 15 '02	Jul 15 '02																						
262	1.1.2.8.2.2	<b>Cables from JPC to crates: PreProducti</b>	Sep 17 '03	Oct 4 '05																						
263	1.1.2.8.2.2.1	Finalize preproduction cables and cc	Sep 17 '03	Dec 11 '03																						
264	1.1.2.8.2.2.2	JPC-Crates preProduction Cables	Dec 11 '03	Dec 11 '03																						
265	1.1.2.8.2.2.3	Preproduction JPC-crates cables: pr	Dec 12 '03	Feb 12 '04																						
266	1.1.2.8.2.2.4	Preproduction JPC-crates cable: tes	Feb 13 '04	Mar 11 '04																						
267	1.1.2.8.2.2.5	Preproduction JPC-Crates cables	Mar 11 '04	Mar 11 '04																						
268	1.1.2.8.2.2.6	Explicit Slack: Order Cables for Ji	Aug 10 '04	Mar 17 '05																						
269	1.1.2.8.2.2.7	Production go ahead on JPC-Crat	Mar 17 '05	Mar 17 '05																						
270	1.1.2.8.2.2.8	Production JPC-crates cables: procu	Mar 18 '05	Jun 10 '05																						
271	1.1.2.8.2.2.9	Production JPC-crates cables: testin	Jun 13 '05	Oct 4 '05																						
272	1.1.2.8.2.2.10	Production JPC cables available	Jul 12 '05	Jul 12 '05																						
273	1.1.2.8.2.2.11	Production JPC cables complete	Oct 4 '05	Oct 4 '05																						
274	1.1.2.9	<b>Fiber Transition Module Replacements</b>	Apr 5 '02	Mar 14 '06																						
275	1.1.2.9.1	<b>FTM Prototype</b>	Apr 5 '02	May 3 '02																						
276	1.1.2.9.1.1	modify existing FTM for milestone #1	Apr 5 '02	May 2 '02																						
277	1.1.2.9.1.2	FTM ready for milestone #1	May 3 '02	May 3 '02																						
278	1.1.2.9.2	<b>FTM - 1st Preproduction</b>	Apr 30 '03	Mar 2 '04																						
279	1.1.2.9.2.1	Explicit Slack: FTM design	Apr 30 '03	Jul 10 '03																						
280	1.1.2.9.2.2	FTM: spec, design and layout	Jul 11 '03	Oct 31 '03																						
281	1.1.2.9.2.3	FTM Submission	Oct 31 '03	Oct 31 '03																						
282	1.1.2.9.2.4	FTM: procurement and assembly	Nov 3 '03	Jan 5 '04																						

CDF Run2b Silicon Detector Schedule - Gantt Chart



CDF Run2b Silicon Detector Schedule - Gantt Chart

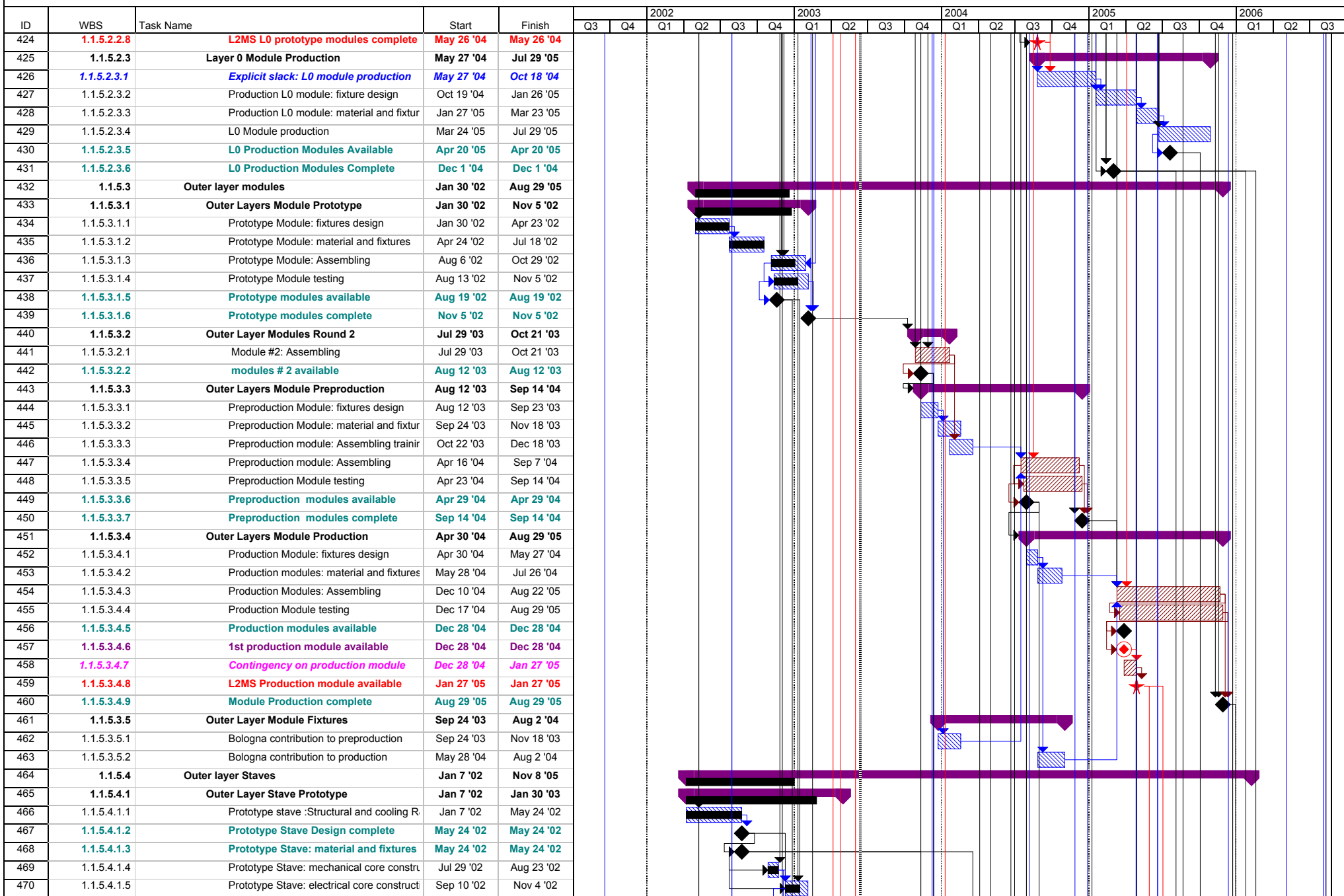




CDF Run2b Silicon Detector Schedule - Gantt Chart

ID	WBS	Task Name	Start	Finish	2002		2003				2004				2005				2006							
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3					
377	1.1.3.1.4.2	Production sensor manufacturing	Feb 9 '04	Jun 14 '04																						
378	1.1.3.1.4.3	Production Sensors Available (Japan)	Sep 10 '03	Sep 10 '03																						
379	1.1.3.1.4.4	Sensor Testing	Sep 11 '03	Apr 22 '05																						
380	1.1.3.2	Layer 0	Jul 10 '02	Aug 24 '04																						
381	1.1.3.2.1	layer L0	Nov 25 '02	Aug 24 '04																						
382	1.1.3.2.1.1	Explicit slack on L0 sensor design	Nov 25 '02	Sep 10 '03																						
383	1.1.3.2.1.2	L0 Sensor final design work	Sep 11 '03	Oct 8 '03																						
384	1.1.3.2.1.3	L0 Production sensor order	Oct 8 '03	Oct 8 '03																						
385	1.1.3.2.1.4	L0 sensors production	Jun 29 '04	Jul 27 '04																						
386	1.1.3.2.1.5	Sensor Testing	Jul 28 '04	Aug 24 '04																						
387	1.1.3.2.1.6	L0 Sensors Available	Aug 24 '04	Aug 24 '04																						
388	1.1.3.2.1.7	L0 Sensors Complete	Jul 27 '04	Jul 27 '04																						
389	1.1.3.2.2	layer L00 left over	Jul 10 '02	Jul 16 '02																						
390	1.1.3.2.2.1	L00 sensors purchase	Jul 10 '02	Jul 16 '02																						
391	1.1.4	Cooling and Monitoring	Oct 18 '02	Jan 4 '06																						
392	1.1.4.1	Cooling system SiDet	Aug 12 '03	Nov 10 '04																						
393	1.1.4.1.1	Build system for cooling staves during burn-in	Aug 12 '03	Sep 9 '03																						
394	1.1.4.1.2	Update SiDet barrel cooling system	Sep 16 '04	Nov 10 '04																						
395	1.1.4.2	Cooling Manifolds and chiller components	Mar 18 '03	Feb 16 '05																						
396	1.1.4.2.1	Build internal manifolds and tubing	Mar 18 '03	Aug 6 '03																						
397	1.1.4.2.2	Explicit slack: build external manifolds, chiller components	Aug 7 '03	Aug 4 '04																						
398	1.1.4.2.3	Build external manifolds	Aug 5 '04	Oct 28 '04																						
399	1.1.4.2.4	production chiller components, manifolds, cooling system	Oct 29 '04	Feb 16 '05																						
400	1.1.4.3	Interlocks	Mar 18 '05	Jan 4 '06																						
401	1.1.4.3.1	Upgrade existing system	Mar 18 '05	Jan 4 '06																						
402	1.1.4.4	Position Monitoring	Oct 18 '02	May 12 '03																						
403	1.1.4.4.1	prototype Rasniks	Oct 18 '02	Mar 17 '03																						
404	1.1.4.4.1.1	Rasnik Prototype manufacturing and test	Oct 18 '02	Mar 17 '03																						
405	1.1.4.4.2	production rasnik	Mar 18 '03	May 12 '03																						
406	1.1.4.4.2.1	Rasnik Production	Mar 18 '03	May 12 '03																						
407	1.1.4.4.2.2	Rasniks Complete	May 12 '03	May 12 '03																						
408	1.1.4.5	Radiation Monitoring	Jan 14 '05	Oct 26 '05																						
409	1.1.4.5.1	Radiation monitors for inner(SVX and ISL) det	Jan 14 '05	Mar 11 '05																						
410	1.1.4.5.2	External radiation monitors and beam abort system	Aug 31 '05	Oct 26 '05																						
411	1.1.5	Construction of Modules, Staves and L0	Jan 7 '02	Nov 8 '05																						
412	1.1.5.1	Beginning of Mechanical Project	Jan 7 '02	Jan 7 '02																						
413	1.1.5.2	L0 Module Construction	Jan 23 '03	Jul 29 '05																						
414	1.1.5.2.1	Layer 0 Module R&D	Jan 23 '03	Apr 16 '03																						
415	1.1.5.2.1.1	L0 modules R&D and Prototype	Jan 23 '03	Apr 16 '03																						
416	1.1.5.2.2	L0 Module Preproduction	Apr 17 '03	May 26 '04																						
417	1.1.5.2.2.1	Explicit Slack: L0 module preproduction	Apr 17 '03	Sep 8 '03																						
418	1.1.5.2.2.2	L0 module: fixtures design	Sep 9 '03	Dec 3 '03																						
419	1.1.5.2.2.3	L0 module: material and fixtures	Dec 4 '03	Feb 4 '04																						
420	1.1.5.2.2.4	L0 prototype module construction	Feb 5 '04	Mar 3 '04																						
421	1.1.5.2.2.5	L0 Prototype modules available	Mar 3 '04	Mar 3 '04																						
422	1.1.5.2.2.6	L0 prototype modules evaluation	Mar 4 '04	May 26 '04																						
423	1.1.5.2.2.7	L0 prototype modules complete	May 26 '04	May 26 '04																						

CDF Run2b Silicon Detector Schedule - Gantt Chart





CDF Run2b Silicon Detector Schedule - Gantt Chart

ID	WBS	Task Name	Start	Finish	2002			2003				2004				2005				2006				
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3			
518	1.1.6.1.1.1.1	Bulkhead Initial Concept studies	Jan 7 '02	May 10 '02																				
519	1.1.6.1.1.1.2	Bulkhead Prototype: Design	May 13 '02	Aug 6 '02																				
520	1.1.6.1.1.1.3	Bulkhead Prototype: fabrication	Aug 6 '02	Aug 7 '02																				
521	1.1.6.1.1.1.4	Bulkhead Prototype: assembly and t	Oct 31 '02	Jan 31 '03																				
522	1.1.6.1.1.1.5	<b>Explicit Slack: prototype Barrel M</b>	<b>Aug 7 '02</b>	<b>Nov 20 '02</b>																				
523	1.1.6.1.1.2	<b>Bulkhead Production</b>	<b>Dec 8 '03</b>	<b>Dec 10 '04</b>																				
524	1.1.6.1.1.2.1	<b>Explicit Slack: Bulkhead producti</b>	<b>Dec 8 '03</b>	<b>Mar 26 '04</b>																				
525	1.1.6.1.1.2.2	Bulkhead: Final Design	Mar 29 '04	May 21 '04																				
526	1.1.6.1.1.2.3	Bulkhead Final Design Complete	May 21 '04	May 21 '04																				
527	1.1.6.1.1.2.4	Bulkhead: fabrication	May 24 '04	Sep 15 '04																				
528	1.1.6.1.1.2.5	Bulkhead: assembly, testing	Sep 16 '04	Dec 10 '04																				
529	1.1.6.1.1.2.6	Bulkheads Complete	Dec 10 '04	Dec 10 '04																				
530	1.1.6.1.2	<b>Barrel Mounts</b>	<b>Nov 25 '02</b>	<b>Aug 17 '04</b>																				
531	1.1.6.1.2.1	<b>Barrel Mounts Prototypes</b>	<b>Nov 25 '02</b>	<b>Apr 18 '03</b>																				
532	1.1.6.1.2.1.1	Prototype barrel mount Design	Nov 25 '02	Feb 21 '03																				
533	1.1.6.1.2.1.2	Prototype barrel mount fabrication	Feb 24 '03	Mar 21 '03																				
534	1.1.6.1.2.1.3	Prototype barrel mount: assembly ar	Mar 24 '03	Apr 18 '03																				
535	1.1.6.1.2.2	<b>Barrel Mount Production</b>	<b>May 24 '04</b>	<b>Aug 17 '04</b>																				
536	1.1.6.1.2.2.1	Barrel mount design modifications	May 24 '04	Jun 21 '04																				
537	1.1.6.1.2.2.2	Production Barrel mount Fabrication	Jun 22 '04	Jul 20 '04																				
538	1.1.6.1.2.2.3	Production barrel mount: assembly	Jul 21 '04	Aug 17 '04																				
539	1.1.6.1.3	<b>Outer screens</b>	<b>Mar 3 '03</b>	<b>Sep 15 '04</b>																				
540	1.1.6.1.3.1	<b>Outer Screens Preproduction</b>	<b>Mar 3 '03</b>	<b>Jun 16 '03</b>																				
541	1.1.6.1.3.1.1	Design outer screen and mounts	Mar 3 '03	Mar 21 '03																				
542	1.1.6.1.3.1.2	Barrel outer screen preproduction fai	Mar 24 '03	May 16 '03																				
543	1.1.6.1.3.1.3	Barrel outer screen mount fabrication	Mar 24 '03	Apr 18 '03																				
544	1.1.6.1.3.1.4	Test outer screen and mounts	May 19 '03	Jun 16 '03																				
545	1.1.6.1.3.2	<b>Outer Screens Production</b>	<b>Jun 22 '04</b>	<b>Sep 15 '04</b>																				
546	1.1.6.1.3.2.1	Design final outer screen and mount	Jun 22 '04	Jul 20 '04																				
547	1.1.6.1.3.2.2	Barrel outer screen production moun	Jul 21 '04	Aug 17 '04																				
548	1.1.6.1.3.2.3	Barrel outer screen: production fabri	Jul 21 '04	Sep 15 '04																				
549	1.1.6.1.4	<b>Inner Screens</b>	<b>Nov 25 '02</b>	<b>Sep 15 '04</b>																				
550	1.1.6.1.4.1	<b>Inner Screen Prototypes</b>	<b>Nov 25 '02</b>	<b>Feb 21 '03</b>																				
551	1.1.6.1.4.1.1	Design Inner screen and mounts	Nov 25 '02	Dec 20 '02																				
552	1.1.6.1.4.1.2	Inner Screen prototype fabrication	Dec 23 '02	Jan 24 '03																				
553	1.1.6.1.4.1.3	Barrel inner screen mount fabricator	Dec 23 '02	Jan 24 '03																				
554	1.1.6.1.4.1.4	Test inner screen and mounts	Jan 27 '03	Feb 21 '03																				
555	1.1.6.1.4.2	<b>Inner Screens Production</b>	<b>Jul 21 '04</b>	<b>Sep 15 '04</b>																				
556	1.1.6.1.4.2.1	Design final inner screen and mount:	Jul 21 '04	Aug 17 '04																				
557	1.1.6.1.4.2.2	Barrel inner screen production moun	Aug 18 '04	Sep 15 '04																				
558	1.1.6.1.4.2.3	Inner screen production fabrication	Aug 18 '04	Sep 15 '04																				
559	1.1.6.1.5	<b>Analysis of Barrel sturcture</b>	<b>Mar 3 '03</b>	<b>Sep 10 '03</b>																				
560	1.1.6.1.5.1	analysis of barrel structure	Mar 3 '03	Sep 10 '03																				
561	1.1.6.1.5.2	Test structural stiffness	Apr 21 '03	Sep 10 '03																				
562	1.1.6.1.6	<b>Bulkhead alignment fixture</b>	<b>Dec 23 '02</b>	<b>Oct 8 '03</b>																				
563	1.1.6.1.6.1	<b>Prototype bulkhead alignment fixture</b>	<b>Dec 23 '02</b>	<b>May 16 '03</b>																				
564	1.1.6.1.6.1.1	design prototype bulkhead alignmen	Dec 23 '02	Feb 21 '03																				

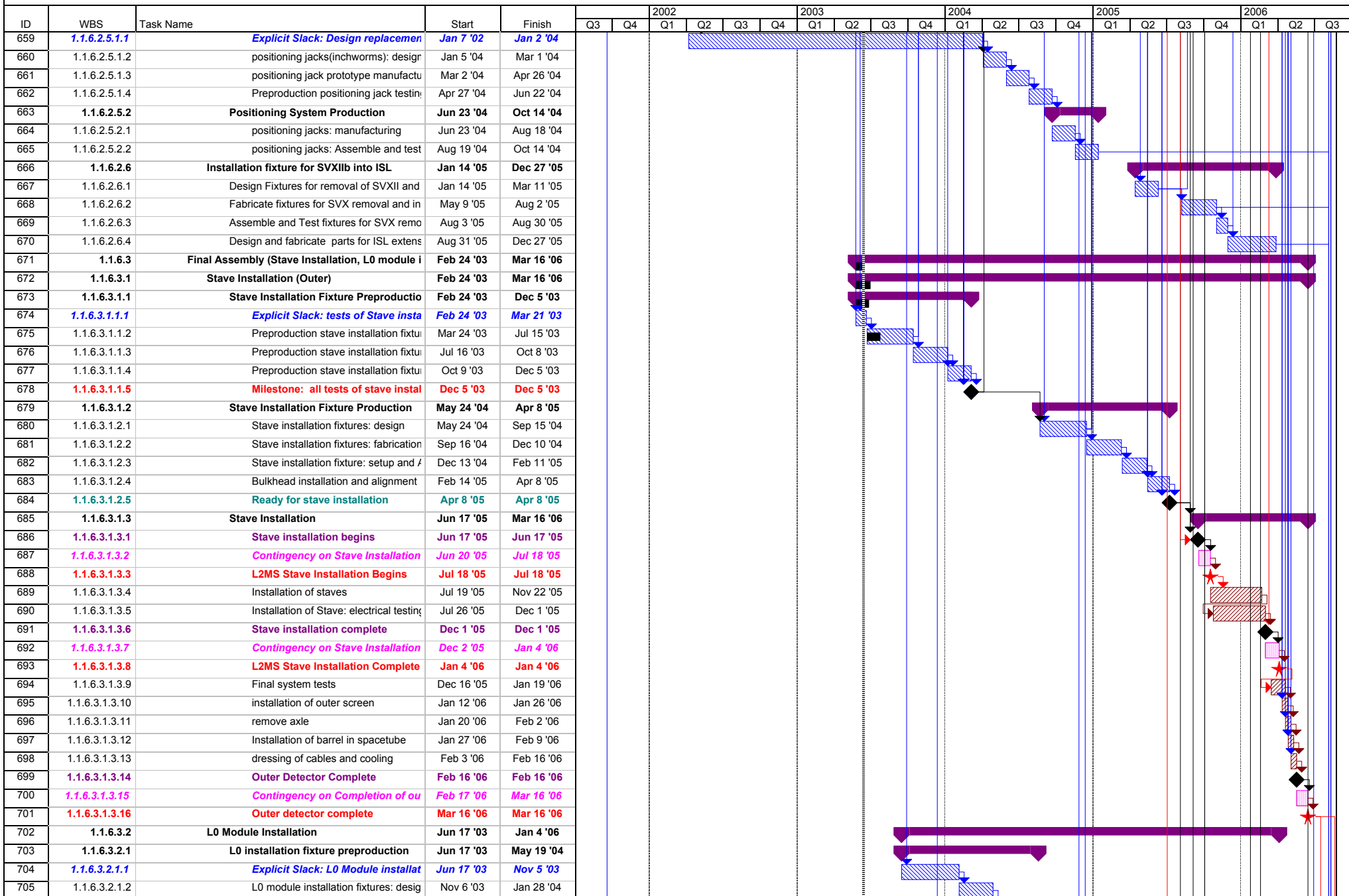
CDF Run2b Silicon Detector Schedule - Gantt Chart

ID	WBS	Task Name	Start	Finish	2002				2003				2004				2005				2006							
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3			
565	1.1.6.1.6.1.2	Fabricate prototype fixture	Feb 24 '03	Apr 18 '03																								
566	1.1.6.1.6.1.3	Test bulkhead alignment fixture	Apr 21 '03	May 16 '03																								
567	<b>1.1.6.1.6.2</b>	<b>Production fixture</b>	<b>Jul 16 '03</b>	<b>Oct 8 '03</b>																								
568	1.1.6.1.6.2.1	Design production fixture	Jul 16 '03	Aug 12 '03																								
569	1.1.6.1.6.2.2	Fabricate production fixture	Aug 13 '03	Oct 8 '03																								
570	<b>1.1.6.1.7</b>	<b>Outer Screen Installation Fixture</b>	<b>Jul 16 '03</b>	<b>Nov 10 '04</b>																								
571	<b>1.1.6.1.7.1</b>	<b>preproduction screen installation fixtu</b>	<b>Jul 16 '03</b>	<b>Sep 10 '03</b>																								
572	1.1.6.1.7.1.1	Design preproduction screen installa	Jul 16 '03	Aug 12 '03																								
573	1.1.6.1.7.1.2	Fabricate preproduction screen insta	Aug 13 '03	Sep 10 '03																								
574	<b>1.1.6.1.7.2</b>	<b>production screen installation fixture</b>	<b>Sep 16 '04</b>	<b>Nov 10 '04</b>																								
575	1.1.6.1.7.2.1	Design Production screen installator	Sep 16 '04	Oct 13 '04																								
576	1.1.6.1.7.2.2	Fabricate production screen installat	Oct 14 '04	Nov 10 '04																								
577	<b>1.1.6.1.8</b>	<b>Axle Removal Fixture</b>	<b>Sep 16 '04</b>	<b>Apr 22 '05</b>																								
578	<b>1.1.6.1.8.1</b>	<b>preproduction axle fixture</b>	<b>Sep 16 '04</b>	<b>Jan 28 '05</b>																								
579	1.1.6.1.8.1.1	Design axle removal fixture	Sep 16 '04	Nov 10 '04																								
580	1.1.6.1.8.1.2	Fabricate axel removalfixture	Nov 11 '04	Jan 13 '05																								
581	1.1.6.1.8.1.3	Test axle removal fixture	Jan 14 '05	Jan 28 '05																								
582	<b>1.1.6.1.8.2</b>	<b>production axle fixture</b>	<b>Jan 31 '05</b>	<b>Apr 22 '05</b>																								
583	1.1.6.1.8.2.1	Design Production axle removal fixtu	Jan 31 '05	Feb 25 '05																								
584	1.1.6.1.8.2.2	Fabricate production axle removal fi	Feb 28 '05	Apr 22 '05																								
585	<b>1.1.6.1.9</b>	<b>Barrel into Spacetube Fixture</b>	<b>Mar 1 '04</b>	<b>May 27 '05</b>																								
586	<b>1.1.6.1.9.1</b>	<b>preproduction fixture</b>	<b>Mar 1 '04</b>	<b>Mar 4 '05</b>																								
587	<b>1.1.6.1.9.1.1</b>	<i>Explicit Slack: design barrel to sp</i>	<i>Mar 1 '04</i>	<i>Sep 29 '04</i>																								
588	1.1.6.1.9.1.2	Design fixture	Sep 30 '04	Dec 3 '04																								
589	1.1.6.1.9.1.3	Fabricate fixture	Dec 6 '04	Feb 4 '05																								
590	1.1.6.1.9.1.4	Test fixture	Feb 7 '05	Mar 4 '05																								
591	<b>1.1.6.1.9.2</b>	<b>production fixture</b>	<b>Mar 7 '05</b>	<b>May 27 '05</b>																								
592	1.1.6.1.9.2.1	Design Production fixture	Mar 7 '05	Apr 1 '05																								
593	1.1.6.1.9.2.2	Fabricate production fixture	Apr 4 '05	May 27 '05																								
594	<b>1.1.6.1.10</b>	<b>Spacetube and cradle and rails</b>	<b>Feb 3 '03</b>	<b>Jan 13 '05</b>																								
595	<b>1.1.6.1.10.1</b>	<b>Spacetube preproduction</b>	<b>Feb 3 '03</b>	<b>Feb 27 '04</b>																								
596	<b>1.1.6.1.10.1.1</b>	<i>Explicit Slack: start preproduction</i>	<i>Feb 3 '03</i>	<i>Apr 11 '03</i>																								
597	1.1.6.1.10.1.2	Design spacetube	Apr 14 '03	Aug 5 '03																								
598	1.1.6.1.10.1.3	Fabricate preproduction spacetube	Aug 6 '03	Nov 26 '03																								
599	1.1.6.1.10.1.4	Test preproduction spacetube	Dec 1 '03	Feb 27 '04																								
600	<b>1.1.6.1.10.2</b>	<b>Spacetube Production</b>	<b>Mar 1 '04</b>	<b>Jan 13 '05</b>																								
601	<b>1.1.6.1.10.2.1</b>	<i>explicit slack: start production sp</i>	<i>Mar 1 '04</i>	<i>May 7 '04</i>																								
602	1.1.6.1.10.2.2	Design production spacetube	Jun 22 '04	Jul 20 '04																								
603	1.1.6.1.10.2.3	Fabricate production Spacetube	Jul 21 '04	Nov 10 '04																								
604	1.1.6.1.10.2.4	Test production spacetube	Nov 11 '04	Jan 13 '05																								
605	<b>1.1.6.1.10.3</b>	<b>Support Cradle</b>	<b>Aug 6 '03</b>	<b>Nov 5 '03</b>																								
606	1.1.6.1.10.3.1	Design support cradle	Aug 6 '03	Sep 10 '03																								
607	1.1.6.1.10.3.2	Fabricate support cradle	Sep 11 '03	Nov 5 '03																								
608	<b>1.1.6.1.10.4</b>	<b>Update cradle support rail system</b>	<b>Aug 6 '03</b>	<b>Nov 26 '03</b>																								
609	1.1.6.1.10.4.1	rail system: Design	Aug 6 '03	Oct 1 '03																								
610	1.1.6.1.10.4.2	rail system: Fabrication	Oct 2 '03	Oct 29 '03																								
611	1.1.6.1.10.4.3	rail system: assembly and alignment	Oct 30 '03	Nov 26 '03																								

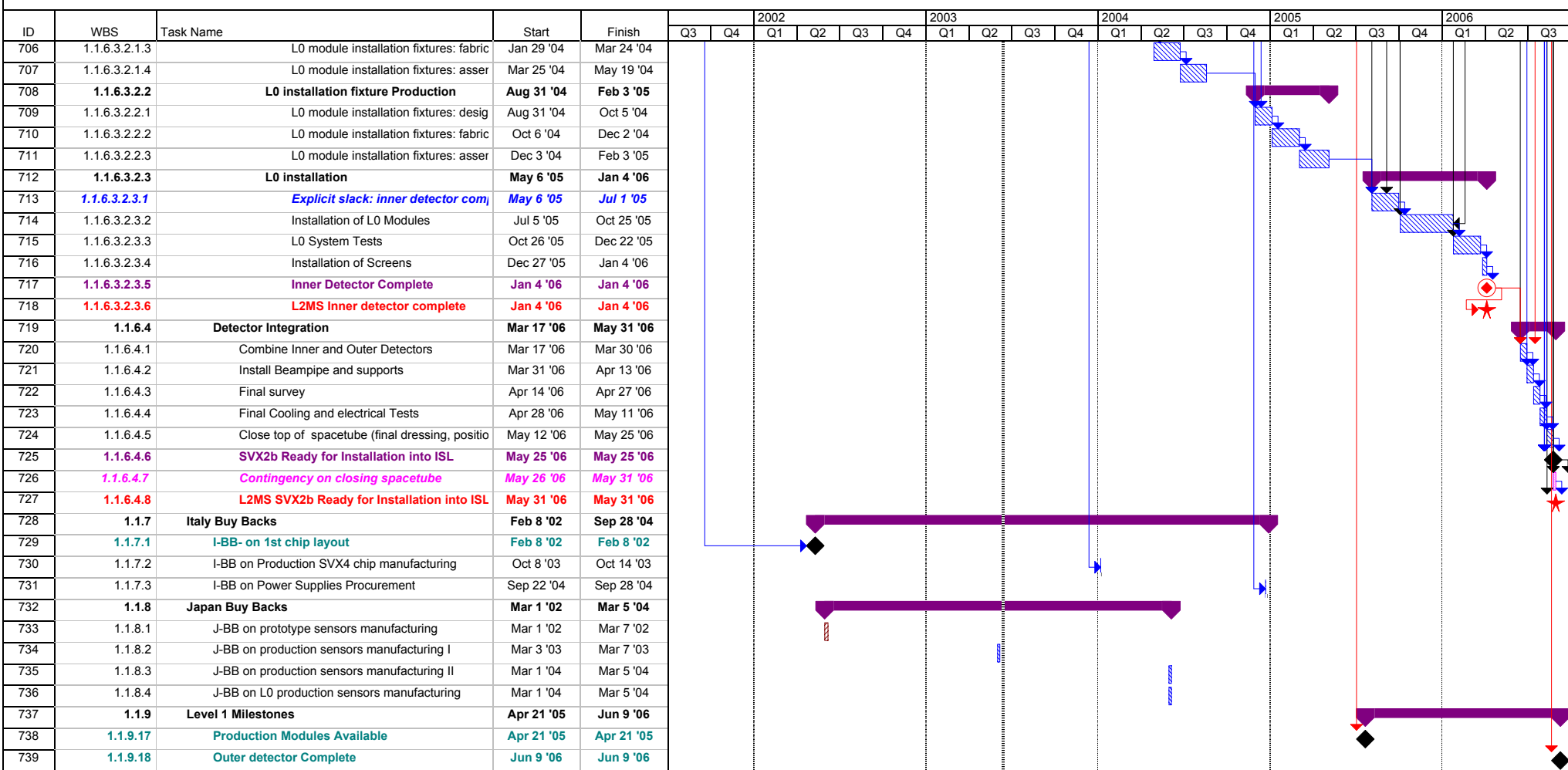
CDF Run2b Silicon Detector Schedule - Gantt Chart

ID	WBS	Task Name	Start	Finish	2002		2003				2004				2005				2006				
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
612	1.1.6.1.11	Layer 0 CF structure	May 13 '02	May 5 '05																			
613	1.1.6.1.11.1	Layer 0 CF support R&D	May 13 '02	Dec 13 '02																			
614	1.1.6.1.11.1.1	CF Support R&D	May 13 '02	Dec 13 '02																			
615	1.1.6.1.11.2	L0 CF support Proproduction	Dec 16 '02	May 26 '04																			
616	1.1.6.1.11.2.1	Explicit Slack: CF Support manuf	Dec 16 '02	Feb 28 '03																			
617	1.1.6.1.11.2.2	CF Support Design	Mar 3 '03	Jun 16 '03																			
618	1.1.6.1.11.2.3	CF Support Preproduction: manufac	Jun 17 '03	Nov 5 '03																			
619	1.1.6.1.11.2.4	CF Support: evaluation and testing	Mar 4 '04	May 26 '04																			
620	1.1.6.1.11.2.5	preproduction CF support ready a	May 26 '04	May 26 '04																			
621	1.1.6.1.11.3	Layer 0 CF support production	May 27 '04	May 5 '05																			
622	1.1.6.1.11.3.1	CF Support: Design	May 27 '04	Aug 30 '04																			
623	1.1.6.1.11.3.2	CF Support: manufacturing	Aug 31 '04	Dec 23 '04																			
624	1.1.6.1.11.3.3	Explicit Slack: CF Support manuf	Dec 28 '04	Mar 10 '05																			
625	1.1.6.1.11.3.4	CF Support: assembly and test	Mar 11 '05	May 5 '05																			
626	1.1.6.1.11.3.5	L0 Supports Complete	May 5 '05	May 5 '05																			
627	1.1.6.2	Integration Fixtures	Jan 7 '02	Dec 27 '05																			
628	1.1.6.2.1	Inner detector installation fixtures	May 27 '04	Oct 3 '05																			
629	1.1.6.2.1.1	L0 inst. Fixture Preproduction	May 27 '04	Apr 6 '05																			
630	1.1.6.2.1.1.1	Explicit Slack: Inner detector inst	May 27 '04	Aug 6 '04																			
631	1.1.6.2.1.1.2	Preproduction Inner Detector Install	Aug 9 '04	Dec 8 '04																			
632	1.1.6.2.1.1.3	Preproduction Inner Detector Install	Dec 9 '04	Mar 9 '05																			
633	1.1.6.2.1.1.4	Preproduction Inner Detector Install	Mar 10 '05	Apr 6 '05																			
634	1.1.6.2.1.2	L0 inst. Fixture Production	Apr 7 '05	Oct 3 '05																			
635	1.1.6.2.1.2.1	Inner Detector Installation Fixtures: f	Apr 7 '05	Jun 9 '05																			
636	1.1.6.2.1.2.2	Inner Detector Installation Fixtures: f	Jun 10 '05	Sep 2 '05																			
637	1.1.6.2.1.2.3	Inner Detector Installation Fixtures: t	Sep 6 '05	Oct 3 '05																			
638	1.1.6.2.1.2.4	Ready to integrate inner and outer	Oct 3 '05	Oct 3 '05																			
639	1.1.6.2.2	Beampipe supports	Jul 21 '04	Jul 5 '05																			
640	1.1.6.2.2.1	Beampipe supports preproduction	Jul 21 '04	May 20 '05																			
641	1.1.6.2.2.1.1	Explicit Slack: start beampipe sup	Jul 21 '04	Feb 25 '05																			
642	1.1.6.2.2.1.2	Design preproduction beampipe su	Feb 28 '05	Mar 25 '05																			
643	1.1.6.2.2.1.3	Fabricate preproduction beampipe s	Mar 28 '05	Apr 22 '05																			
644	1.1.6.2.2.1.4	Test preproduction beampipe supp	Apr 25 '05	May 20 '05																			
645	1.1.6.2.2.2	Beampipe Supports (production)	May 23 '05	Jul 5 '05																			
646	1.1.6.2.2.2.1	Design final beampipe supports	May 23 '05	Jun 6 '05																			
647	1.1.6.2.2.2.2	Fabricate final beampipe supports	Jun 7 '05	Jul 5 '05																			
648	1.1.6.2.3	Beampipe Installation Fixtures	Apr 25 '05	Aug 16 '05																			
649	1.1.6.2.3.1	Beampipe installation fixture: Design	Apr 25 '05	May 20 '05																			
650	1.1.6.2.3.2	Beampipe installation fixture: fabrication	May 23 '05	Jun 20 '05																			
651	1.1.6.2.3.3	procure mockup beampipe	Jun 21 '05	Jul 19 '05																			
652	1.1.6.2.3.4	Beampipe installation fixture: test	Jul 20 '05	Aug 16 '05																			
653	1.1.6.2.4	Transportation Fixtures	May 23 '05	Dec 9 '05																			
654	1.1.6.2.4.1	transportation fixture: update design	May 23 '05	Jul 19 '05																			
655	1.1.6.2.4.2	transportation fixture: fabrication	Jul 20 '05	Sep 14 '05																			
656	1.1.6.2.4.3	transportation fixture: final assembly and	Sep 15 '05	Dec 9 '05																			
657	1.1.6.2.5	Positioning system (inchworms)	Jan 7 '02	Oct 14 '04																			
658	1.1.6.2.5.1	Positioning System preproduction	Jan 7 '02	Jun 22 '04																			

CDF Run2b Silicon Detector Schedule - Gantt Chart











CDF Run2b Silicon Detector Schedule - Gantt Chart





Project: CDF Run2b Silicon Detector S  
Date: Mar 13 '03

Task		Rolled Up Task		External Tasks		External Milestone	◆	level 2	
Critical Task		Rolled Up Critical Task		Project Summary		External Milestone	◆		
Progress		Rolled Up Milestone	◇	External Milestone	◆	External Milestone	◆		
Milestone	◆	Rolled Up Progress		External Milestone	◆	Deadline	↓		
Summary		Split		External Milestone	◆	summary	