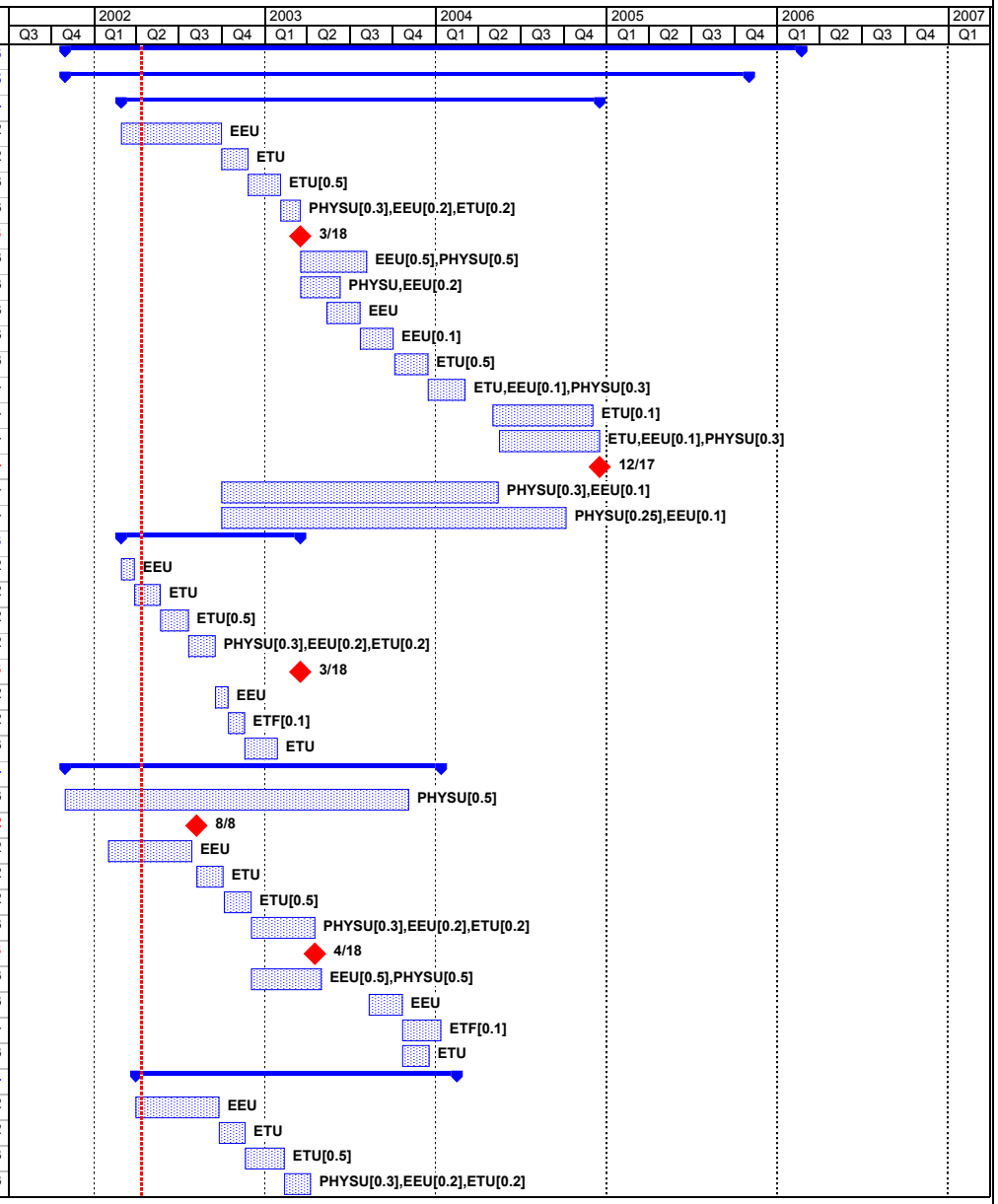
Run 2b Level 1 Trigger

ID	WBS	Task Name	Duration	Start	Finish
1	1.2	Run 2b Level 1 Trigger	212.8 w	11/1/01	2/22/06
2	1.2.1	Level 1 Calorimeter Trigger	198.8 w	11/1/01	11/2/05
3	1.2.1.1	ADC/Digital Filter (ADF)	140 w	3/1/02	12/17/04
4	1.2.1.1.1	Design prototype ADF	30 w	3/1/02	10/1/02
5	1.2.1.1.2	Layout prototype ADC	8 w	10/2/02	11/26/02
6	1.2.1.1.3	Fabricate/Assemble Prototype ADF	8 w	11/27/02	2/4/03
7	1.2.1.1.4	Bench Test Prototype ADF	6 w	2/5/03	3/18/03
8	1.2.1.1.5	Prototype ADF Shipped To Fermilab	0 w	3/18/03	3/18/03
9	1.2.1.1.6	Develop in-situ exercizing/debugging software	20 w	3/19/03	8/7/03
10	1.2.1.1.7	ADF Prototype in-situ tests	12 w	3/19/03	6/11/03
11	1.2.1.1.8	Final ADF design	10 w	5/14/03	7/24/03
12	1.2.1.1.9	Procure ADF components	10 w	7/25/03	10/3/03
13	1.2.1.1.10	Fabricate, Assemble 10% ADF	10 w	10/6/03	12/16/03
14	1.2.1.1.11	Bench test 10% ADF	10 w	12/17/03	3/5/04
15	1.2.1.1.12	Fabricate production ADF	30 w	5/3/04	12/3/04
16	1.2.1.1.13	Bench test production ADF	30 w	5/17/04	12/17/04
17	1.2.1.1.14	ADF Production Complete And Tested	0 w	12/17/04	12/17/04
18	1.2.1.1.15	Digital filter FPGA programming	80 w	10/2/02	5/14/04
19	1.2.1.1.16	Other ADF online software (downloading, monitoring)	100 w	10/2/02	10/6/04
20	1.2.1.2	ADF Crates	52 w	3/1/02	3/18/03
21	1.2.1.2.1	Design prototype backplane	4 w	3/1/02	3/28/02
22	1.2.1.2.2	Layout and fabricate prototype backplane	8 w	3/29/02	5/23/02
23	1.2.1.2.3	Fabricate/Assemble Prototype crate	8 w	5/24/02	7/22/02
24	1.2.1.2.4	Test prototype crate ADF in prototype crate	8 w	7/23/02	9/17/02
25	1.2.1.2.5	ADF+Crate Prototype Complete	0 w	3/18/03	3/18/03
26	1.2.1.2.6	Final backplane design	4 w	9/18/02	10/15/02
27	1.2.1.2.7	Procure crate components	5 w	10/16/02	11/19/02
28	1.2.1.2.8	Assemble ADF crates	8 w	11/20/02	1/28/03
29	1.2.1.3	Trigger Algorithm Board	108 w	11/1/01	1/13/04
30	1.2.1.3.1	Design and simulate trigger algorithms	100 w	11/1/01	11/5/03
31	1.2.1.3.2	Choose Baseline Jet Algorithm	0 w	8/8/02	8/8/02
32	1.2.1.3.3	Design prototype Trigger Algorithm Board (TAB)	25 w	2/1/02	7/29/02
33	1.2.1.3.4	Layout prototype TAB	8 w	8/9/02	10/4/02
34	1.2.1.3.5	Fabricate/Assemble Prototype TAB	8 w	10/7/02	12/3/02
35	1.2.1.3.6	Test prototype TAB	18 w	12/4/02	4/18/03
36	1.2.1.3.7	TAB Prototype Complete	0 w	4/18/03	4/18/03
37	1.2.1.3.8	Develop in-situ exercizing/debugging software	20 w	12/4/02	5/2/03
38	1.2.1.3.9	Final TAB design	10 w	8/13/03	10/22/03
39	1.2.1.3.10	Procure TAB parts	10 w	10/23/03	1/13/04
40	1.2.1.3.11	Layout final TAB	8 w	10/23/03	12/19/03
41	1.2.1.4	Global Algorithm Board (GAB)	93 w	4/1/02	2/16/04
42	1.2.1.4.1	Design prototype GAB	25 w	4/1/02	9/25/02
43	1.2.1.4.2	Layout prototype GAB	8 w	9/26/02	11/20/02
44	1.2.1.4.3	Farbricate/Assemble Prototype GAB	10 w	11/21/02	2/12/03
45	1.2.1.4.4	Test Prototype GAB	8 w	2/13/03	4/9/03

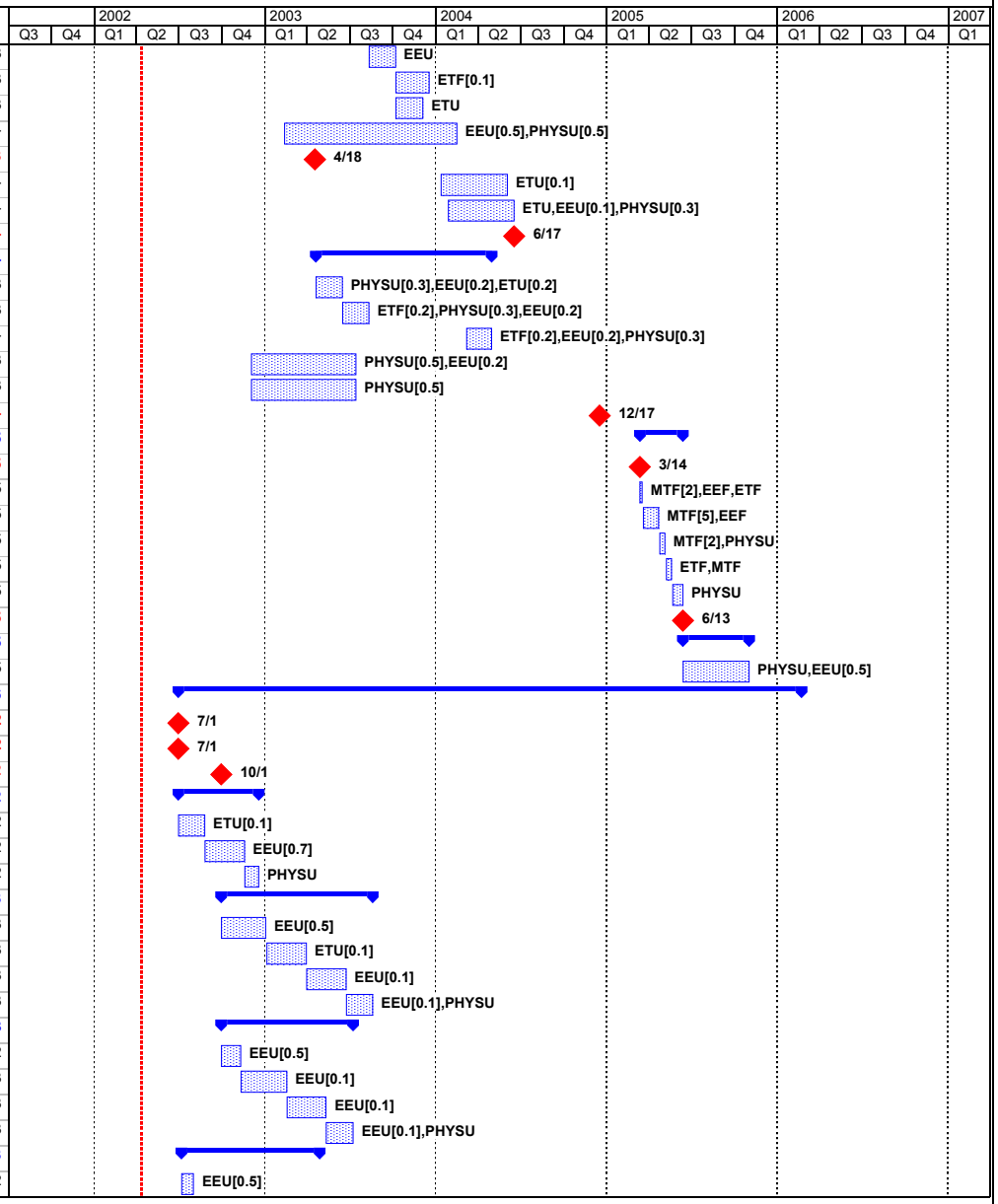


Project: Run2b_Trigger_Schedule_4-7
Date: 4/10/02

Task		Milestone		Rolled Up Task		External Tasks	
Critical Task		Critical Milestone		Rolled Up Split		Project Summary	
Split		Completed Milestone		Rolled Up Milestone		External Milestone	
Progress		Summary		Rolled Up Progress		Deadline	

Run 2b Level 1 Trigger

ID	WBS	Task Name	Duration	Start	Finish
46	1.2.1.4.5	Final GAB design	8 w	8/13/03	10/8/03
47	1.2.1.4.6	Procure GAB parts	10 w	10/9/03	12/19/03
48	1.2.1.4.7	Layout final GAB	8 w	10/9/03	12/5/03
49	1.2.1.4.8	TAB/GAB online software	50 w	2/13/03	2/16/04
50	1.2.1.5	**TAB/GAB Prototype Complete**	0 w	4/18/03	4/18/03
51	1.2.1.6	Fabricate production TAB and GAB	20 w	1/14/04	6/3/04
52	1.2.1.7	Bench test production TAB and GAB	20 w	1/29/04	6/17/04
53	1.2.1.8	**TAB/GAB Production Complete And Tested**	0 w	6/17/04	6/17/04
54	1.2.1.9	**Integration**	51.4 w	4/21/03	4/30/04
55	1.2.1.9.1	Prototype integration test ADF+TAB	8 w	4/21/03	6/16/03
56	1.2.1.9.2	Prototype integration test ADF+TAB+GAB+TFW	8 w	6/17/03	8/12/03
57	1.2.1.9.3	pre-Production integration test ADF+TAB+TFW	8 w	3/8/04	4/30/04
58	1.2.1.10	TAB FPGA programming	30 w	12/4/02	7/15/03
59	1.2.1.11	TAB other online software (downloading, monitoring)	30 w	12/4/02	7/15/03
60	1.2.1.12	**L1 Cal Production And Testing Complete**	0 w	12/17/04	12/17/04
61	1.2.1.13	**Installation**	13 w	3/14/05	6/13/05
62	1.2.1.13.1	**Run2a L1 Cal Trigger Decommissioned**	0 w	3/14/05	3/14/05
63	1.2.1.13.2	Remove old racks	1 w	3/14/05	3/18/05
64	1.2.1.13.3	Redress cables	5 w	3/21/05	4/22/05
65	1.2.1.13.4	Install new racks	2 w	4/25/05	5/6/05
66	1.2.1.13.5	Connect new services	2 w	5/9/05	5/20/05
67	1.2.1.13.6	Install ADFs and TABs	3 w	5/23/05	6/13/05
68	1.2.1.13.7	**Installation Complete**	0 w	6/13/05	6/13/05
69	1.2.1.14	**Commissioning**	20 w	6/14/05	11/2/05
70	1.2.1.14.1	Technical commissioning	20 w	6/14/05	11/2/05
71	1.2.2	**Level 1 Calorimeter Track Matching**	180.4 w	7/1/02	2/22/06
72	1.2.2.1	**Format Of Data To Cal-track Match Specified**	0 w	7/1/02	7/1/02
73	1.2.2.2	**Preliminary Latency Calculation Complete**	0 w	7/1/02	7/1/02
74	1.2.2.3	**D0 Internal Design Review Complete**	0 w	10/1/02	10/1/02
75	1.2.2.4	**SLDB**	24 w	7/1/02	12/19/02
76	1.2.2.4.1	Procure SLDB parts	8 w	7/1/02	8/26/02
77	1.2.2.4.2	Fabricate and assemble SLDBs	12 w	8/27/02	11/19/02
78	1.2.2.4.3	Test SLDBs	4 w	11/20/02	12/19/02
79	1.2.2.5	**MTCxx**	44 w	10/1/02	8/20/03
80	1.2.2.5.1	(Small) design changes to MCTxx	12 w	10/1/02	1/3/03
81	1.2.2.5.2	Procure MTCxx parts	12 w	1/6/03	3/31/03
82	1.2.2.5.3	Fabricate and assemble MTCxx's	12 w	4/1/03	6/24/03
83	1.2.2.5.4	Test MTCxx's	8 w	6/25/03	8/20/03
84	1.2.2.6	**MTCM**	38 w	10/1/02	7/9/03
85	1.2.2.6.1	(Small) design changes to MTCM	6 w	10/1/02	11/11/02
86	1.2.2.6.2	Procure MTCM parts	12 w	11/12/02	2/17/03
87	1.2.2.6.3	Fabricate and assemble MTCMs	12 w	2/18/03	5/12/03
88	1.2.2.6.4	Test MTCMs	8 w	5/13/03	7/9/03
89	1.2.2.7	**MT Flavor Board**	40 w	7/8/02	4/28/03
90	1.2.2.7.1	Design prototype MTFB	4 w	7/8/02	8/2/02

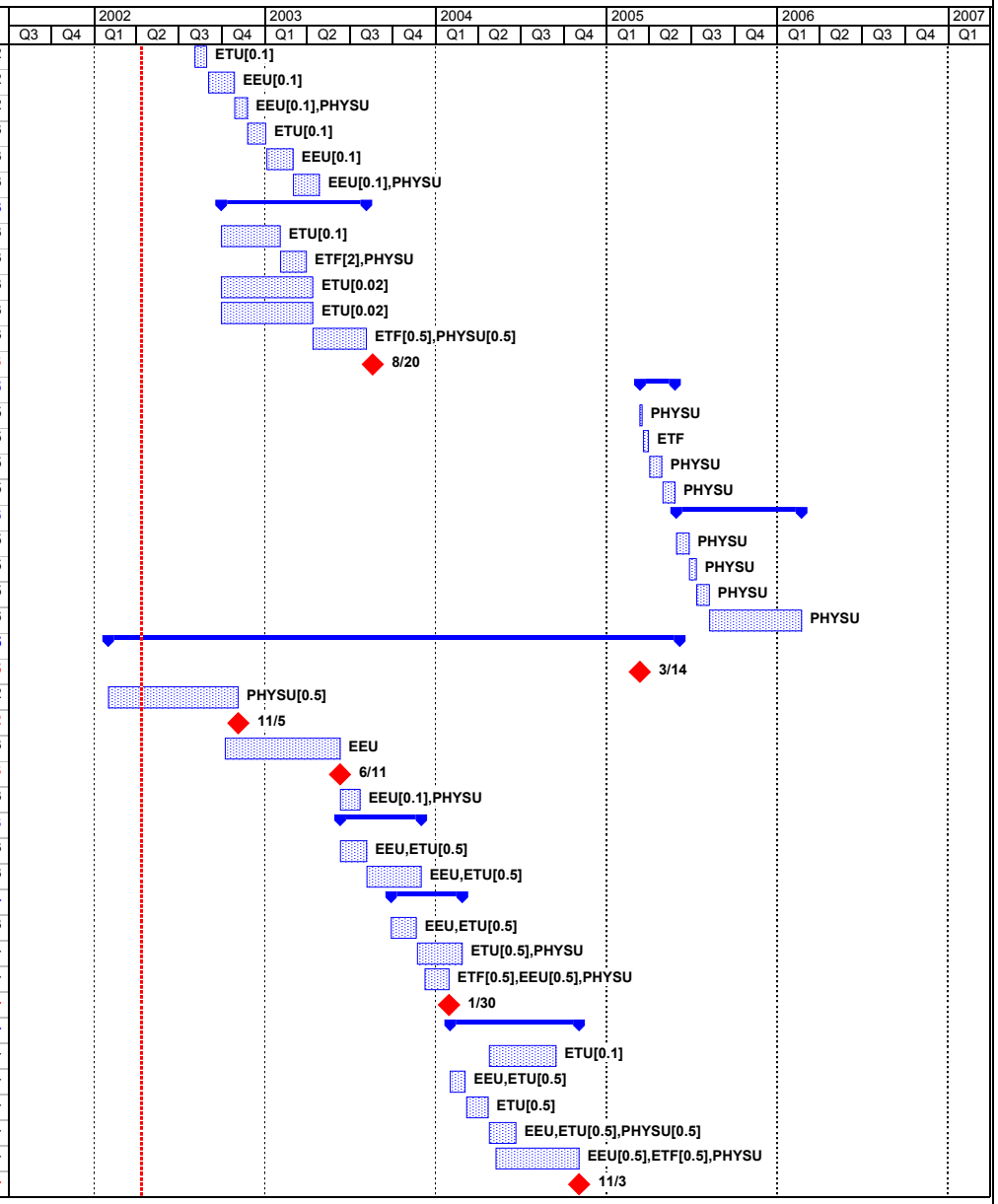


Project: Run2b_Trigger_Schedule_4-7
Date: 4/10/02

Task		Milestone		Rolled Up Task		External Tasks	
Critical Task		Critical Milestone		Rolled Up Split		Project Summary	
Split		Completed Milestone		Rolled Up Milestone		External Milestone	
Progress		Summary		Rolled Up Progress		Deadline	

Run 2b Level 1 Trigger

ID	WBS	Task Name	Duration	Start	Finish
91	1.2.2.7.2	Procure prototype MTFB parts	4 w	8/5/02	8/30/02
92	1.2.2.7.3	Fabricate and assemble prototypeMTFB	8 w	9/3/02	10/28/02
93	1.2.2.7.4	Test prototype MTFB	4 w	10/29/02	11/25/02
94	1.2.2.7.5	Procure MTFB parts	4 w	11/26/02	1/3/03
95	1.2.2.7.6	Fabricate and assemble MTFB	8 w	1/6/03	3/3/03
96	1.2.2.7.7	Test MTFB	8 w	3/4/03	4/28/03
97	**1.2.2.8**	**Infrastructure**	**42 w**	**10/1/02**	**8/6/03**
98	1.2.2.8.1	Procure cables and connectors	16 w	10/1/02	2/3/03
99	1.2.2.8.2	Assemble cables	8 w	2/4/03	3/31/03
100	1.2.2.8.3	Procure processors and VME crate	26 w	10/1/02	4/14/03
101	1.2.2.8.4	Procure power supplies	26 w	10/1/02	4/14/03
102	1.2.2.8.5	Assemble and test power supplies	16 w	4/15/03	8/6/03
103	**1.2.2.9**	**Production and Testing Completed**	**0 w**	**8/20/03**	**8/20/03**
104	**1.2.2.10**	**Installation**	**11 w**	**3/14/05**	**5/27/05**
105	1.2.2.10.1	Install VME crates and power supplies	1 w	3/14/05	3/18/05
106	1.2.2.10.2	Install rack services	2 w	3/21/05	4/1/05
107	1.2.2.10.3	Install cables	4 w	4/4/05	4/29/05
108	1.2.2.10.4	Hook up electronics	4 w	5/2/05	5/27/05
109	**1.2.2.11**	**Commissioning**	**36 w**	**5/31/05**	**2/22/06**
110	1.2.2.11.1	Debug input from all sources	4 w	5/31/05	6/27/05
111	1.2.2.11.2	Debug MTM decision to TFW	2 w	6/28/05	7/12/05
112	1.2.2.11.3	Debug L2, L3 readout	4 w	7/13/05	8/9/05
113	1.2.2.11.4	System tests	26 w	8/10/05	2/22/06
114	**1.2.3**	**Level 1 Tracking**	**166.4 w**	**2/1/02**	**6/6/05**
115	**1.2.3.1**	**Run 2a L1 CTT Decommissioned**	**0 w**	**3/14/05**	**3/14/05**
116	1.2.3.2	Develop prototype CTT algorithm	39 w	2/1/02	11/5/02
117	**1.2.3.3**	**Prototype Algorithm Coded And Simulated With FPGA Simu**	**0 w**	**11/5/02**	**11/5/02**
118	1.2.3.4	Develop target CTT algorithm	33 w	10/9/02	6/11/03
119	**1.2.3.5**	**Target Algorithm Coded And Simulated With FPGA Simulati**	**0 w**	**6/11/03**	**6/11/03**
120	1.2.3.6	Develop test procedures	6 w	6/12/03	7/24/03
121	**1.2.3.7**	**DFEA Prototype I**	**24 w**	**6/12/03**	**12/2/03**
122	1.2.3.7.1	Layout	8 w	6/12/03	8/7/03
123	1.2.3.7.2	Assemble and test	16 w	8/8/03	12/2/03
124	**1.2.3.8**	**DFEA Prototype II**	**20 w**	**9/29/03**	**2/27/04**
125	1.2.3.8.1	Layout	8 w	9/29/03	11/21/03
126	1.2.3.8.2	Assemble and test	12 w	11/24/03	2/27/04
127	1.2.3.8.3	Test at Fermilab	6 w	12/10/03	1/30/04
128	**1.2.3.8.4**	**DFEA Prototype Tested At Fermilab**	**0 w**	**1/30/04**	**1/30/04**
129	**1.2.3.9**	**DFEA Production**	**39 w**	**2/2/04**	**11/3/04**
130	1.2.3.9.1	Procure FPGAs	20 w	4/26/04	9/15/04
131	1.2.3.9.2	Design, layout	5 w	2/2/04	3/5/04
132	1.2.3.9.3	Fabricate	7 w	3/8/04	4/23/04
133	1.2.3.9.4	Bench test	8 w	4/26/04	6/21/04
134	1.2.3.9.5	Test at Fermilab	25 w	5/10/04	11/3/04
135	**1.2.3.9.6**	**DFEA Production And Testing Complete**	**0 w**	**11/3/04**	**11/3/04**

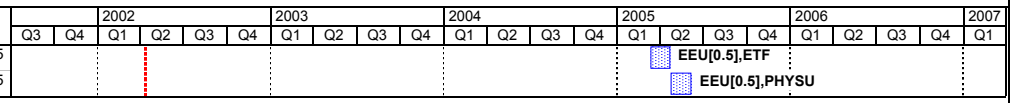


Project: Run2b_Trigger_Schedule_4-7
Date: 4/10/02

Task		Milestone		Rolled Up Task		External Tasks	
Critical Task		Critical Milestone		Rolled Up Split		Project Summary	
Split		Completed Milestone		Rolled Up Milestone		External Milestone	
Progress		Summary		Rolled Up Progress		Deadline	

Run 2b Level 1 Trigger

ID	WBS	Task Name	Duration	Start	Finish
136	1.2.3.10	Install	6 w	3/14/05	4/22/05
137	1.2.3.11	Technical commissioning	6 w	4/25/05	6/6/05



Project: Run2b_Trigger_Schedule_4-7
Date: 4/10/02

Task		Milestone		Rolled Up Task		External Tasks	
Critical Task		Critical Milestone		Rolled Up Split		Project Summary	
Split		Completed Milestone		Rolled Up Milestone		External Milestone	
Progress		Summary		Rolled Up Progress		Deadline	